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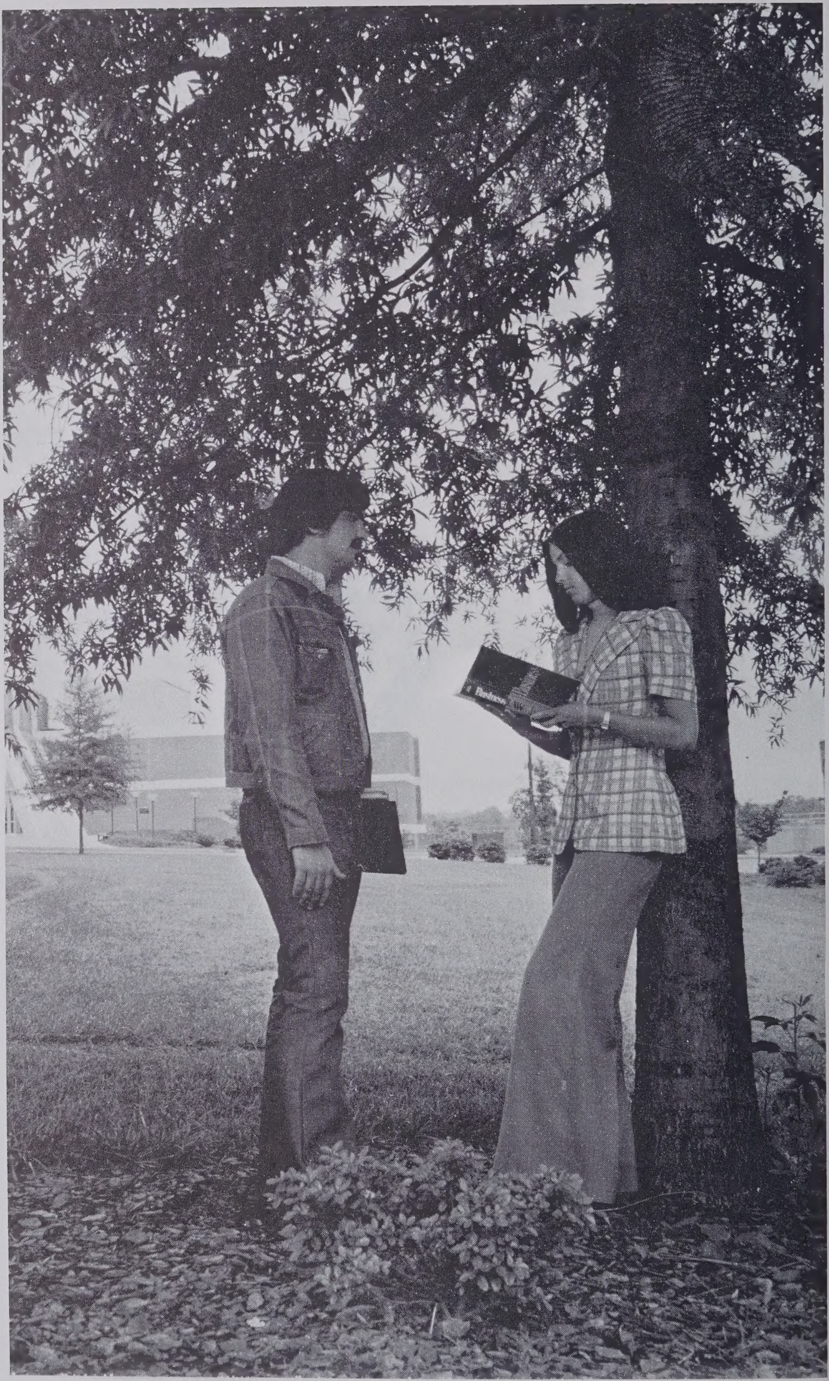
Forsyth Technical Institute

1975 — 1977

Visitors to the Institute are welcome. The Institute's offices are open from eight a.m. until ten p.m., Monday through Thursday, and from eight a.m. until five p.m. on Friday.

FORSYTH TECHNICAL INSTITUTE
GENERAL CATALOGUE
1975-1977

2100 Silas Creek Parkway
Winston-Salem, North Carolina 27103
Telephone: 919 723-0371



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GENERAL INFORMATION

FORSYTH TECHNICAL INSTITUTE

Academic Calendar

1975-76

Date	*Event*
FALL QUARTER — August 25, 1975-November 18, 1975	
August 25	*Orientation for Faculty*
August 26 & 27	*Registration*
August 28	*Orientation for Students*
August 29	*First Day of Classes*
September 1	*Labor Day Holiday*
September 4	*Last Day Drop Add*
November 12, 13, 14	*Exams*
November 17	*Grade Posting*
November 18	*Faculty Holiday*
WINTER QUARTER — November 19, 1975-February 20, 1976	
November 19 & 20	*Registration*
November 21	*First Day of Classes*
November 26	*Last Day Drop Add*
November 27 & 28	*Thanksgiving Holidays*
December 24-January 2	*Christmas Holidays and New Year's Day*
January 5	*Classes Resume*
February 17, 18, 19	*Exams*
February 20	*Grade Posting*
SPRING QUARTER — February 23, 1976-May 14, 1976	
February 23 & 24	*Registration*
February 25	*First Day of Classes*
March 1	*Last Day Drop Add*
April 19	*Easter Holiday*
May 10, 11, 12	*Exams*
May 13	*Grade Posting*
May 14	*Faculty Holiday*
SUMMER QUARTER — May 17, 1976-August 6, 1976	
May 17 & 18	*Registration*
May 19	*First Day of Classes*
May 24	*Last Day Drop Add*
July 5	*July 4th Holiday*
August 2, 3, 4	*Exams*
August 5	*Grade Posting*
August 6	*Graduation (Faculty Work Day)*

August 9-August 20 — Annual Vacation

FORSYTH TECHNICAL INSTITUTE
Academic Calendar
1976-77

Date	*Event*
FALL QUARTER — August 23, 1976-November 16, 1976	
August 23	*Orientation for Faculty*
August 24 & 25	*Registration*
August 26	*Orientation for Students*
August 27	*First Day of Classes*
September 1	*Last Day Drop Add*
September 6	*Labor Day Holiday*
November 10, 11, 12	*Exams*
November 15	*Grade Posting*
November 16	*Faculty Holiday*
WINTER QUARTER — November 17, 1976-February 21, 1977	
November 17 & 18	*Registration*
November 19	*First Day of Classes*
November 24	*Last Day Drop Add*
November 25 & 26	*Thanksgiving Holidays*
December 23 — January 3	*Christmas Holidays and New Year's Day*
January 4	*Classes Resume*
February 15, 16, 17	*Exams*
February 18	*Grade Posting*
February 21	*Faculty Work Day*
SPRING QUARTER — February 22, 1977-May 16, 1977	
February 22 & 23	*Registration*
February 24	*First Day of Classes*
March 1	*Last Day Drop Add*
April 11	*Easter Holiday*
May 10, 11, 12	*Exams*
May 13	*Grade Posting*
May 16	*Faculty Holiday*
SUMMER QUARTER — May 17, 1977-August 5, 1977	
May 17	*Registration*
May 18	*First Day of Classes*
May 23	*Last Day Drop Add*
July 4	*July 4th Holiday*
August 1, 2, 3	*Exams*
August 4	*Grade Posting*
August 5	*Graduation (Faculty Work Day)*

August 8-August 19 — Annual Vacation

PURPOSE

The purpose of Forsyth Technical Institute is to prepare people for gainful employment and effective community membership. Inherent within this purpose is the total development of the individual. The major objective of the curriculum programs is to develop within the student a vocational or technical proficiency to meet the expanding advances in industry, business, and health occupations. The Institute is also dedicated to the concept of continuing education through the Adult Education Program directed toward self-improvement in cultural, avocational, and vocational pursuits.

The course of study at Forsyth Technical Institute seeks to attain the stated purpose of the institution by:

(1) providing effective teaching to all who enroll, with a continuing interest in the individual in terms of behavior, motivation, and achievement;
(2) providing educational opportunities for adults who discontinued their formal training before mastering the basic skills in general education;
(3) providing vocational training for students who are preparing to enter skilled trades;
(4) providing technical training for those persons wishing to enter the more highly skilled occupations in business, industry, and health service;
(5) providing technical, vocational, and enrichment courses on a part-time basis for adults now employed.

HISTORY

Forsyth Technical Institute can trace its beginning to early adult and high school vocational courses which were available in Winston-Salem. In 1958, a Chamber of Commerce Study Committee recommended that an Industrial Education Center be built to provide the trade and technical training needed by local industry. A bond issue provided the money to start construction of two buildings late in 1959, and the first adult classes were begun in October of 1960. In 1963, a third building was constructed, and new technical programs were added. That same year the North Carolina Legislature passed the Community College Act, creating a statewide system of Community Colleges, Technical Institutes, and Industrial Education Centers. In January, 1964, the name of the school was changed to Forsyth Technical Institute. The operation of the school was transferred from the Winston-Salem/Forsyth County Schools to the State Board of Education which in turn operates the school through the State Department of Community Colleges and a local Board of Trustees.

LOCATION AND FACILITIES

The Institute is located at 2100 Silas Creek Parkway in the southwest section of Winston-Salem. It is easily accessible from U. S. Highway 52, North Carolina Highway 150, and Interstate Highway 40.

Five buildings house modern laboratories, shops, and classrooms. Lease arrangements have also made space available at the Allied Health Building of Bowman Gray School of Medicine, North Carolina Baptist Hospital, and Forsyth Memorial Hospital for nursing and allied health programs.

HOURS OF INSTRUCTION

Day classes are scheduled between the hours of 7:00 a.m. and 5:00 p.m., Monday through Friday. Evening classes meet between the hours of 6:00 p.m. and 10:00 p.m., Monday through Thursday. Some adult education classes also meet on Saturday morning.

ACCREDITATION

Forsyth Technical Institute is accredited by the Southern Association of Colleges and Schools, and is approved by the North Carolina Board of Education.

Electronics Engineering Technology, Manufacturing Engineering Technology, and Mechanical Drafting and Design Engineering Technology are accredited by the Engineers' Council for Professional Development.

The Associate Degree Nursing program is accredited by the North Carolina State Board of Nursing and the Allied Health programs are accredited by the American Medical Association.

The Institute is a member in good standing of the American Association of Community and Junior Colleges.

PROGRAMS OF STUDY

ASSOCIATE IN APPLIED SCIENCE DEGREE

Architectural Technology
Associate Degree Nursing
Business Administration
Early Childhood Specialist
Electronic Data Processing (Business)
Electronics Engineering Technology
Executive Secretarial Science
Executive Secretarial Science — Machine Transcription Option
Fire Science Technology
Manufacturing Engineering Technology

- Marketing and Retailing
- Mechanical Drafting and Design Engineering Technology
- Nuclear Medicine Technology
- Ornamental Horticulture
- Police Science Technology
- Radiologic Technology
- Real Estate
- Respiratory Therapy Technology

DIPLOMA PROGRAMS

- Air Conditioning, Refrigeration and Heating
- Automotive Body Repair
- Automotive Mechanics
- Building Trades Drafting
- Carpentry
- Diesel Truck Maintenance and Repair
- Electrical Installation
- Electronic Servicing
- Graphic Arts (Printing)
- Machinist
- Mechanical Drafting
- Plumbing and Heating
- Practical Nurse Education
- Welding and Metal Fabrication

ADULT EDUCATION

- Adult Basic Education
- Adult High School Program
- General Adult Enrichment Program
- Manpower Training Programs
- New and Expanding Industry Training Programs
- Special Seminars and Workshops
- Management Development Training
- Vocational-Technical Extension Programs

ADMISSIONS

ADMISSION REQUIREMENTS

Forsyth Technical Institute is an Equal Opportunity Educationa Institution and operates under an "open door" admissions policy. Admission to the Institute does not, however, imply immediate admission to the program desired by the applicant. Before a prospectiv student is admitted to a specific curriculum, a counseling intervie may be arranged, and usually aptitude and placement tests ar scheduled. This process helps the student to evaluate his potential fo success in his chosen field. When an evaluation of test scores and othe evidence indicates a lack of readiness to enter a specific program, th student may be assigned to enter the Pre-Technical Program or he may be encouraged to re-examine his educational and occupational goals.

Forsyth Technical Institute will accept credit from other technical institutes and colleges. For specific information refer to "Transfer Student."

Admission to Associate Degree Programs

High school graduation, or the equivalent, is required of all applicants for degree programs. The high school equivalency certificate or the state adult education diploma is acceptable in lieu of a regular high school diploma.

Applicants to the associate degree programs who are not high school graduates may arrange to complete high school in the Adult Education program, or take the high school equivalency examination (G.E.D.) at the Learning Lab.

Applicants for admission to the engineering technologies must present one unit in algebra and one unit in plane geometry. Applicants to the Electronic Data Processing program must present one unit in algebra. Applicants for admission to associate degree health programs must present one unit in algebra, one unit in biology, and one unit in chemistry. High school physics is recommended for Engineering and Allied Health curricula.

Applicants who do not meet course requirements may arrange to make up the deficiency by completing special classes during the summer, or in the Adult Education Program, or in the Learning Lab. Deficiencies must be made up prior to admission to a curriculum.

Applicants to associate degree programs should submit scores on either the Scholastic Aptitude Test or the Comparative Guidance and Placement Test. Information concerning the Scholastic Aptitude Test may be obtained from high school counselors. Information on taking the Comparative Guidance and Placement Test is available from the Student Personnel Office at Forsyth Technical Institute.

The Health programs are the only programs that require the approval of applicants by the Health Admissions Committee. The members of the Admissions Committee come from the instructional staff of the health curricula and the Student Personnel staff.

The purpose of the committee is to evaluate all available data concerning each applicant and to determine that each applicant possesses the special characteristics and personality that these programs seem to require. Factors considered by the committee are:

1. The applicant's maturity and emotional stability
2. The previous educational record
3. Test data
4. The applicant's stated interests
5. Personal data
6. Medical history

NOTE: The North Carolina Board of Nursing may deny license to individuals convicted of a felony or any other crime involving moral turpitude.

The committee is mindful that much of the clinical training involves the students working with patients in local hospitals, that their role is constantly being expanded with increasing responsibilities, and that the program must educate and train in anticipation of future demands. A majority of the committee must concur that an applicant meets minimum criteria before he or she is admitted. If the program's enrollment quota is filled before all applications are received, late applicants are informed that they may reapply for the following year.

Any female student in Radiologic Technology or Nuclear Medicine Technology who is or becomes pregnant during the clinical portion of the training must notify the Department Head and Senior faculty instructor and will be dropped from the program. Exposure to radiation must be avoided because of the possible harmful effects to the developing fetus.

The student may return to the program, if in good academic standing, after the completion of the pregnancy. The time of reentry into the program will be determined by the Department Head and the Senior faculty instructor.

Admission to Diploma Programs

The applicant for admission to diploma programs must have completed high school or be eighteen or more years of age and not enrolled in high school. The applicant must have completed the tenth grade satisfactorily or have scores on the G.E.D. equivalent to the tenth grade. The high school equivalency certificate or the state adult education diploma is acceptable in lieu of a regular high school diploma.

Applicants are generally admitted on the basis of high school records. A suitable entrance test may be required by the Institute.

Admission to the Practical Nurse Education program must be approved by the Health Admissions Committee.

Admission to Adult Education and Extension Programs

Persons to be enrolled must be eighteen years of age or older and the class with which they entered high school must have graduated. Further information concerning registration procedures may be obtained from the office of the Director of Adult Education.

ADMISSIONS PROCEDURES

Applicants for admission to any degree or diploma program should:

1. Obtain an application form from the Office of Student Personnel or from a high school counselor.
2. Submit the properly completed application to the Office of Student Personnel.
3. Arrange to take the Comparative Guidance and Placement Test devised by the Educational Testing Service if applying for Associate Degree Programs. Scores should be sent to the Office of Student Personnel. Scholastic Aptitude Test (SAT) scores may be substituted for the Comparative Guidance and Placement Test.
4. Request that a transcript of all high school and post high school academic work be sent directly to the Office of Student Personnel.
5. Submit recommendations if requested.
6. Report for a personal interview, if requested, on the date scheduled by the Office of Student Personnel. At this interview test scores and previous academic records will be evaluated and the applicant will be advised as to eligibility for admission to the desired program.
7. Take required placement tests as scheduled by the Office of Student Personnel.
8. Submit a properly completed health appraisal form when requested.

PLACEMENT TESTS

Placement tests may be required as indicated below:

1. Mathematics: applicants to Architectural Technology, Electronic Data Processing (Business), Electronics Engineering Technology, Manufacturing Engineering Technology, Mechanical Drafting and Design Engineering Technology, Allied Health programs, and Associate Degree Nursing.
2. Educational Skills Tests: applicants to Associate Degree Nursing and Allied Health programs.
3. Programmer Aptitude Test: applicants to Electronics Data Processing (Business).
4. Typewriting Proficiency: applicants to Business Administration, Ornamental Horticulture, and Executive Secretarial Science (if applicants have had previous training in typing.)
5. Other special tests as required by the institution.

Students who fail to pass the mathematics placement test will be required to take Pre-Technical Mathematics in the summer prior to enrollment. A course grade of C or better is required for admission to regular technical mathematics.

Students who pass the typewriting proficiency test are given credit for Typewriting I.

Scores on the Programmer Aptitude test are used for counseling purposes only.

REGISTRATION

The Institute operates on the quarter system. Each quarter is eleven weeks in length and students who are pursuing diploma or degree programs must register at the beginning of each quarter. Al students are expected to register during the time set aside for that purpose. Registration dates are listed in the calendar for the academic year. With few exceptions, new students must initially register for the fall quarter.

Tuition charges must be paid on the day of registration.

LATE REGISTRATION

All registration for a class is closed after the fourth class day. A student may register late through the fourth class meeting date providing:

1. That the class is not cancelled or closed.
2. That the student has the consent of his advisor and has met admissions and prerequisite requirements.
3. That the student pay a $5.00 late registration fee in full at the time of late registration unless he registers late at the request of the Institute.

ORIENTATION

All new full-time students are expected to participate in an orientation program conducted by members of the faculty, staff and student government. Part-time students are urged to participate also The purpose of orientation is to acquaint the student with the administrative personnel, faculty, and student leaders. The regulations policies and privileges of the Institute as set forth in the catalogue are discussed and interpreted.

ACADEMIC INFORMATION

GRADUATION REQUIREMENTS

Graduation requirements for the degree or diploma will vary according to curriculum. The student should refer to the specific section of the catalogue which applies to his program so that he may be certain of the course requirements for graduation. All students must earn a cumulative grade point average of 2.0, and must have received a passing grade in all required subjects, in order to be eligible for graduation.

Grade Point Average (G.P.A.) is obtained by dividing the tota quality points earned by the total number of credit hours work attempted.

GRADING SYSTEM

The following grading system is used by Forsyth Technical Institute:

No. Grade	Letter Equivalent	Description	Quality Points Per Quarter Hour
94-100	A	Excellent	4
86-93	B	Good	3
78-85	C	Fair	2
70-77	D	Passing	1
Below 70	F	Failing	0
Official Withdrawal	W		
Withdrawn Passing	W-P		
Withdrawn Failing	W-F		
Incomplete	Inc.		
Audit	Aud.		

The letter equivalent system is used for recording and reporting grades.

W— Official Withdrawal

An Official Withdrawal is the grade given to a student who voluntarily withdraws from a course after the drop/add period through the tenth class day of a quarter and has notified the instructor and the Registrar, in person, or in writing of his decision.

W-P — Withdrawn Passing

Withdrawn Passing is the grade given to a student who voluntarily withdraws from a course after the tenth class day of a quarter with a passing grade, and has notified the instructor and the Registrar in person or in writing, of his decision.

W-F — Withdrawn Failing

Withdrawn Failing is the grade given to a student who at any time after the fourth class day withdraws from a course without first notifying the instructor and the Registrar, in person or in writing, of his decision. Students who withdraw after the tenth class day and are failing at the time of withdrawal receive a grade of W-F.

INC. — Incomplete

The grade of Incomplete is given only if a student has a valid reason for failure to complete the work on schedule. Illness, absence on company business, or other circumstances beyond the student's control are considered valid reasons for non-completion of work. The tudent must have advised his instructor of the circumstances and have been granted an incomplete grade. The instructor must have pecified the work to be made up in order to remove the incomplete and a date by which the work must be completed. The instructor cannot authorize a date later than one quarter from the quarter in which an Incomplete was given. If the work is not completed, the grade automatically becomes an F at the end of that quarter.

Aud — Audit

Students taking courses as auditors are not required to take examinations or hand in written work, but may do so if they wish. No grade or credit toward a degree or diploma is given. Audit may not be changed to credit, or credit to audit after the last day of drop-add.

HONORS AND HIGH HONORS LISTS

Soon after the end of each quarter, in order to honor students who have earned outstanding scholastic records, the Institute publishes the Honors and High Honors lists. In order to be named to the Honors List, a student must take a minimum of 12 quarter hours of credit work and earn at least a 3.000 average, but less than a 3.500 average. In order to be named to the High Honors List, a student must take a minimum of 12 quarter hours of credit work and earn at least a 3.500 average.

COURSE NUMBERING SYSTEM

Courses are numbered in accordance with the system approved by the North Carolina Department of Community Colleges.

1. Each course is designated by a three-letter prefix indicating the general subject area.

2. A number indicating a specific course within an area follows the letter prefix according to the following rules:

a. Pre-Technical courses	0- 99
b. Technical courses	100- 299
c. Vocational courses	1000-1099
d. Adult education courses beyond high school	2000-3099

LATE REGISTRATION AND SCHEDULE CHANGES

Late registration and changes in class schedules will not be permitted after the fourth class day of each quarter. All class schedule changes must be approved by the student's advisor, and notification of such changes submitted to the office of the Registrar.

If a student drops a course after the fourth day, but within the first ten days, the drop will be recorded as a W provided that the student has cleared with the Registrar and the instructor.

If the student withdraws after the tenth day, the grade will be recorded as a W-P provided that the student is passing, and provided that he has cleared with the Registrar and the instructor.

If a student withdraws from a course after the fourth day without notifying the Registrar and the instructor, the grade will be recorded as a W-F.

Departure from the above will be allowed only in exceptional cases, and only when the reasons are deemed valid by the student's advisor.

WITHDRAWAL FROM SCHOOL

A student who must withdraw, either permanently or temporarily, before graduation should make an official withdrawal. He should notify the Registrar's office and a member of the couseling staff, either in person or by telephone, and should complete the withdrawal information sheet. This information is necessary to assure that the student's status at the time of withdrawal is clearly identified in order to expedite re-entry, transfer of credit to another institution, or to provide potential employers with accurate educational information.

ACADEMIC STANDING

To be in good academic standing, a beginning student must have earned a grade point average of 2.0 by the end of the first quarter, and a cumulative G.P.A. of 2.0 must be maintained thereafter.

A student failing to attain the required grade point average in any quarter will be placed on academic probation for the following quarter.

A student on probation whose work has improved to the point where he meets the required cumulative grade point average will automatically be removed from probation.

A student who has been placed on probation and who does not earn the required grade point average in the next quarter will be required to register for a reduced load, or he may be required to withdraw from the program and be directed to a more suitable curriculum.

The Academic Review Committee shall make decisions on individual cases. Each student enrolled in the Institute is expected at all times to be aware of his academic status and to be responsible for knowing he has failed to meet the requirements as outlined above for continuing in school. Instructors, faculty advisors, and counselors in the Office of Student Personnel are available for conferences, but it is the responsibility of the student to seek extra help if it is needed.

ACADEMIC REVIEW COMMITTEE

The Academic Review Committee includes the following individuals named by the President:

1. One instructor from vocational curricula
2. One instructor from technical curricula
3. One instructor from general studies
4. One student
5. One administrative staff member from the area of instruction
6. The Director of Student Personnel, who will serve as chairman

The Academic Review Committee shall meet at least once each quarter and review all records of students having a cumulative average less than 2.0, or the records of any other students upon request from any faculty member or administrative staff member. It shall be vested with the responsibility of recommending the probationary terms under which a student in academic difficulty be permitted to re-register. These terms may include the requirements to repeat or not to repeat specific courses, to repeat an entire quarter's work, to carry a reduced load, to enter a more suitable curriculum, or other appropriate recommendations.

If it is decided that the student shall be dropped from enrollment, the Director of Student Personnel shall so inform the student by personal interview, and the President shall so inform the student of this action in writing.

READMISSION PROCEDURES

A student may request readmission by writing to the President requesting that the Review Committee act in his behalf. A student must show just reason for asking this Review Committee to reconvene to reopen his case. Such reasons might be:

1. Removal of academic deficiencies
2. Request for admission to less stringent curriculum
3. A change of demands on the student's out-of-school time.
4. Ability to meet financial responsibilities.
5. Demonstrated improved attitude and conduct.

A student may appeal to the Board of Trustees. An appeal must be initiated by the student and should be in writing to the Chairman of the Board. The Chairman shall present such an appeal to the Board for a hearing, and the President and Office of Student Personnel shall be given an opportunity to present such information as known to them regarding the student.

A student who has voluntarily withdrawn should contact the Student Personnel Office prior to reentry.

COURSE REPEAT RULE

The last grade earned on a repeated course, whether F or higher, will be the grade computed for grade point average.

In the event a student's quality point ratio falls below that required for satisfactory standing, the Academic Review Committee shall review the student's record and make appropriate recommendations to the Dean of Instruction. The Dean of Instruction shall present such recommendations to the President.

If a student fails any course in his trade or technical curriculum, it will be necessary for him to repeat that course until a passing grade is attained in order to receive the State diploma or the Associate of Applied Science degree. This make-up course is scheduled at the discretion of the Institute.

If a student fails one of the courses in his major subject area, he may be counseled out of the curriculum at the end of the quarter in which the failure occurred.

ATTENDANCE

Students are expected to attend all class, laboratory and shop sessions. No passing grade will be issued for a course if, for whatever reason, a student has been absent for 25% of the total possible class time per course per quarter.

A student must satisfy his instructor that he should be permitted to remain in a course and attend classes after he incurs any absence in excess of the following:

1. Three (3) regular one hour class sessions.
2. Two (2) shop or laboratory sessions which meet for two or more hours.
3. Two (2) regular one hour class sessions, and one (1) shop or laboratory session which meets for two or more hours.

When a student is absent from a class and a laboratory or shop session which meet consecutively, each session missed will be counted as an absence, making a total of two absences for that course.

Students have full responsibility for accounting to their instructors for absences. The instructor has final authority for deciding whether work missed can be made up.

Students are expected to report for class on time. Habitual tardiness may, at the discretion of the instructor, be considered in computing class attendance.

COURSE LOAD

The suggested contact hours per quarter shown for each curriculum are minimal. It is the policy of the Institute to permit students to enroll in additional subjects and laboratory work beyond those shown in the catalogue.

SECOND MAJOR IN A DEGREE OR DIPLOMA PROGRAM

A student may receive a second major in his program by meeting the additional requirements of the new program. Credits already earned will be recognized if they meet the criteria established in the "Transfer of Earned Credit Between Programs" as stated below.

TRANSFER OF EARNED CREDIT BETWEEN PROGRAMS

Credits earned in any degree program may be credited toward a degree or diploma program upon evaluation by the Office of Student Personnel. Credits earned in a diploma program are not acceptable for transfer to an associate degree program but may be credited toward a second diploma major.

TRANSFER STUDENTS

Applicants who have attended other institutions of higher learning may transfer credit earned in comparable courses or programs of study if the student is transferring from a regionally accredited institution, or from another institution in the North Carolina Community College System. No grade lower than C may be transferred. A student requesting credit for work completed in any other type of training program or institution may be given advance standing on the basis of a proficiency examination. All transcripts for transfer work should be submitted at least one week prior to enrollment. Final decision on transfer credits will be determined by the Institute.

Students requesting credit for training completed in Armed Services Schools should submit official records of service schools completed. Credit may be granted for training comparable to course work offered in the student's curriculum. The amount of credit granted is subject to approval by the instructor or department head and will not exceed the recommendations in the *Guide to the Evaluation of Educational Experiences in the Armed Services* published by the American Council on Education.

Students may obtain advanced standing in English, mathematics, and other course offerings by submitting satisfactory scores on the College Level Examination Program or the Advanced Placement Tests of Educational Testing Service. Each request will be handled on an individual basis by the Student Personnel Office, faculty advisor, and department head.

STUDENT CLASSIFICATION

Full-time:	A student who is enrolled for 12 or more quarter hours of course work.
Part-time:	A student who is enrolled for less than 12 quarter hours of work.

Special: A student who is enrolled in credit courses but who is not working toward a degree or diploma. A special student must be 18 years of age or a high school graduate. If not a high school graduate he must not be enrolled in a high school, and his high school class must have been graduated prior to the student's enrollment at the Institute. Permission to register as a special student is granted at the discretion of the Office of Student Personnel and the instructor.

Audit: A student who is enrolled in regular course work but who is not receiving credit for work undertaken.

Freshman: Any student who has earned less than 45 credit hours.

Sophomore: Any student who has earned 45 credit hours or more.

GRADE REPORTS AND TRANSCRIPTS

Shortly after the end of each quarter student grade reports are available to students in the office of the Registrar.

Transcripts of the student's record cannot be sent to other schools, prospective employers, or to the student himself, unless an official request is made by the student to the Registrar's office.

Grade reports and transcripts are withheld by the Registrar until all student obligations to the Institute have been met.

STUDENT CONDUCT AND RESPONSIBILITIES

DISMISSAL

A student may be dismissed from the Institute for conduct or personal habits which are not in the best interest of the student or the institution. Any instructor may request a student to leave the instructor's teaching station when, in the opinion of the instructor, the student's conduct or personal habits disrupt normal classroom procedure. The instructor should immediately notify the Dean of Instruction, in writing, of his action and the reasons therefor.

If the instructor feels that additional counseling is needed for this particular student, the instructor shall have the prerogative of asking the student to meet with the department head and/or a counselor prior to his being readmitted to the instructor's class. If, in the opinion of the instructor or the department head, the conduct of the student or his personal habits are such that he should be prohibited from reentering the class, then the Disciplinary Review Committee will be called into session.

Students are expected to abide by school regulations, local, state, and federal laws. Offenders may be subject to dismissal and/or prosecution by law enforcement officers.

DISCIPLINARY REVIEW COMMITTEE

The Disciplinary Review Committee, composed of representatives from the faculty and student body, under the chairmanship of the Dean of Instruction, reviews all cases involving disciplinary action and makes appropriate recommendation to the President.

The committee may also be convened at the request of any student desiring a review of his disciplinary situation, or any faculty or administrative staff member who wishes consultation on individual disciplinary cases.

The decision of the President on disciplinary action is final, with the right of appeal always available to the party involved. Any party wishing to appeal the decision of the President should request, in writing, a formal hearing before the Board of Trustees of the Institute.

STUDENT DRESS CODE

Forsyth Technical Institute continually has prospective employers and other visitors on campus. Also many companies seeking to relocate or open new industries will have representatives visit this campus.

With this in mind, while Forsyth Technical Institute students dress informally, cleanliness and neatness of appearance are strongly encouraged. Each instructor has the right to ask a student to leave his class or shop if the student's personal appearance or attire is objectionable to the other students, or if this attire can be construed to be a hazard to safe operations.

PARKING REGULATIONS

Main Campus

Parking of student vehicles on campus is allowed by permit only. Vehicle parking permits may be obtained as the student completes registration on registration day, when a decal will be assigned each vehicle. The charge for vehicle registration will be $2.00 per vehicle for the school year. Complete parking rules and regulations will be issued along with the decal at the time a vehicle is registered.

Vehicle decals must be appropriately displayed on the rear bumper so they are easily visible from directly behind the vehicle.

Park in designated areas only.
Head all vehicles into spaces.
Park inside yellow lines (where marked).
Do not park on grass at any time.
Park motorcycles in designated areas only.
Observe all signs.
Personnel operating vehicles on the campus must be aware of the safe speeds, parking spaces, and regulations.

Vehicles are registered on registration day, and at other times in the Cashier's office.

Those who do not observe parking rules and regulations may expect a violation penalty of $1.00 per violation. Trustee Policy provides for the enforcement of parking on campus by withholding grades, transcripts, or other evidence of attendance and accomplishments at Forsyth Technical Institute, or suspension from class.

Allied Health Building

Student parking is available at both the Allied Health Building and Forsyth Memorial Hospital. Students are expected to conform with local regulations.

USE OF FACILITIES

The buildings and their contents exist solely for the education of our adult population. The use of the facilities for any other purpose is strictly prohibited. Any use of these facilities for personal gain will result in immediate disciplinary action.

Smoking is prohibited in all classrooms, laboratories and shops.

GRADUATION

GRADUATION REQUIREMENTS

A student wishing to receive a degree or a diploma from this institution must fulfill all course requirements as outlined previously.

A student who has earned a cumulative grade point average of 3.5 is eligible to be graduated with high honors.

A student who has earned a cumulative grade point average of 3.0 is eligible to be graduated with honors.

A student who has earned a cumulative grade point average of 2.0 is eligible for graduation.

Course requirements vary according to program. The student should refer to the catalogue for course requirements for graduation from his program of study and should be aware at all times of his progress toward graduation.

It is the further responsibility of the student to complete an official INTENT TO GRADUATE form at least six weeks prior to his last registration. These forms may be obtained from the faculty advisor who will assist the student in completing the form, and will submit the form to the Office of the Registrar.

COMMENCEMENT EXERCISES

Commencement exercises are held at the end of the Summer quarter on the date published in the academic calendar. Degrees and diplomas are awarded at this time. Students are expected to notify the Registrar's office as to their intention to participate in the exercises.

COMMENCEMENT MARSHALS

The rising sophomores who have maintained the highest scholastic averages during their freshman year are honored by being chosen commencement marshals. The two marshals who have the highest academic averages are named chief marshals.

SCHOOL RINGS

Any student in good standing who has completed at least one-half of the credit hours required for graduation in his curriculum may order the official school ring. The student is required to pay $10.00 deposit at the time he orders his ring, with the balance due upon delivery.

Orders may be placed with the Institute Bookstore.

TUITION AND FEES

TUITION

Since the Institute receives funds from local, state and federal sources, tuition charges are very low. These charges are set by the State Board of Education and are subject to change without notice.

Tuition (Fees):

12 quarter hours or more	$33.00 per quarter
Less than 12 quarter hours	$ 2.75 per quarter hour
Late registration fee	$ 5.00

Tuition charges for non-credit classes in the Extension Program depend upon the nature of the class. No tuition is charged for basic adult education and high school completion classes. Instructional materials fees are set to meet instructional needs in certain types of classes.

Summer School and Audit Fees are charged at the same rate as those charged during the regular term.

Note: Non-residents of the State of North Carolina may be subject to additional tuition fees pending a ruling by the State Office of the Attorney General.

STUDENT ACTIVITY FEE

It is the policy of this institution that a student activity fee be charged. This normally will be from $3.00 to $7.00 per school quarter.

The use of such a student fee is at the discretion of the Board of Trustees upon recommendation of the President. In general, these fees are used for student-centered activities and for the general benefit of the student or the student body.

BOOKS AND SUPPLIES

Textbooks and supplies are not furnished by the Institute, but are the responsibility of the student and may be purchased at the Institute Bookstore. The cost of books and supplies varies from program to program, and from quarter to quarter, but usually range from $35.00 to $55.00 per quarter.

UNIFORMS

Uniforms and other special wearing apparel shall be paid for by the students.

The initial cost of uniforms and special equipment for female students in the various health education programs ranges from $40 to $80 depending upon the program. The cost of uniforms for male students is somewhat less. The cost of uniforms is estimated and subject to change. Students should inquire for details during admission interviews.

TUITION REFUNDS

Tuition is not refundable. Exception will be considered where the cause of withdrawal is completely beyond the student's control, such as serious illnesses. In such cases, two-thirds of the tuition paid may be refunded only if the student withdraws within ten calendar days after the first day of classes, as published in the academic calendar. If a student withdraws from a course but remains enrolled in the Institute, he will receive no refund for the course dropped. Refunds of five dollars or less will not be made except for classes cancelled by the Institute.

A student who withdraws within ten calendar days after the first day of class may request that his tuition be credited to his account so that it may be applied toward costs for any one of the following three quarters.

TUITION REFUNDS — SPECIAL VETERANS

This section applies only to those veterans receiving special educational benefits paid directly to the institution under provisions of Title 38, U. S. Code, as amended:

The institution has and maintains the following policy for the refund of the unused portion of tuition, fees, and other charges in the event the person fails to enter the course or withdraws, or is discontinued therefrom at any time prior to completion.

The amount charged to the persons for tuition, fees, and other charges for a portion of the course will not exceed the approximate pro rata portion of the tuition, fees and other charges that the length of the completed portion of the course bears to its total length.

It is the responsibility of the student to request a refund through the Office of the Registrar.

OTHER FEES

No laboratory, breakage or property damage fees will be charged to students. However, in case of breakage or damage due to gross negligence or maliciousness, a student will be expected to remunerate the institution. Academic credit may be withheld until proper payment is made.

All Library materials are subject to a fine of 5 cents per day after due date.

FINANCIAL AID

SCHOLARSHIPS

The Winston-Salem Kiwanis Club and the Twin City Kiwanis Club award scholarships to seniors graduating from Forsyth County schools each year. The awarding of these scholarships is not controlled by the Institute.

Limited scholarship funds are available in the Diesel, Graphic Arts-Printing, Practical Nursing, Electrical Installation, and Welding Programs. These are generally awarded by the donor upon recommendation of the Forsyth Technical Institute Scholarship Committee.

The Norman Gaddis Scholarship is a perpetual scholarship available to a deserving, needy student in the second quarter of any curriculum.

The Marshall Paul Johnston Scholarship is a perpetual scholarship available to Automotive Mechanics students only.

The Jane Gaither Murray Scholarship is awarded annually to a deserving student entering the Associate Degree Nursing curriculum.

The Mary B. Lauerman Memorial Scholarship is awarded annually to an outstanding student entering the second year of Associate Degree Nursing.

The Sandra Johnson Memorial Scholarship is awarded annually to an outstanding student entering the second year of Executive Secretarial Science.

The Data Processing Management Association Scholarship is awarded annually to an outstanding student entering the second year of Electronic Data Processing.

The Society of Engineering Students awards one scholarship annually to an outstanding student enrolled in the second quarter of either Manufacturing Engineering Technology or Mechanical Drafting and Design Engineering Technology.

Several scholarships in Associate Degree Nursing and Allied Health Programs are also available.

Scholarship applications and guidelines may be obtained at the Student Personnel Office.

Scholarships are awarded after review of applicants by the Scholarship Committee.

GRANTS

The Basic Educational Opportunity Grants Program (BEOG) is available to students in college level programs. Vocational Diploma Programs (except Practical Nursing) are not eligible. The grants are issued according to tables formulated by the U.S. Office of Education and do not have to be repaid.

Applications may be obtained at the Student Personnel Office or the Guidance Counseling Office of the area high schools. Students submit applications directly to the government and should allow four weeks for processing.

LOANS

The Office of Student Personnel maintains a file on sources of financial aid for students. Loans at a low rate of interest are available through the following agencies:

James E. and Mary Z. Bryan Foundation
N.C. Insured Student Loan Program
North Carolina Funds for Vocational and Technical Students
Winston-Salem Foundation*

*Available to Forsyth County Residents only.

James E. and Mary Z. Bryan Foundation Student Loan Plan.

Legal residents of North Carolina enrolled full time in undergraduate programs may borrow up to $1,250 per semester or $833 per quarter for a total of $2,500 per school year for an aggregate of $7,500 through College Foundation, Inc. The interest rate is 1 percent during the in-school and grace periods and 6 percent during the repayment period. Apply through the institution's financial aid office.

N. C. Insured Student Loan Program

Legal residents of North Carolina enrolled full time may borrow up to $1,250 per semester or $833 per quarter for a total of $2,500 pe academic year for an aggregate of $7,500 through College Founda tion, Inc. Loans are insured by the State Education Assistance Authority and under certain conditions, the U. S. Office of Education pays the 7 percent interest during the in-school and grace periods Apply through the institution's financial aid office.

Students desiring to participate in one of these plans should make application to the Office of Student Personnel prior to July 1, in order to be processed according to agency schedules. Late applications will be considered only as long as funds remain.

WORK STUDY

The College Work Study program provides employment opportunities for students, particularly those from low income families who are in need of earnings from part-time employment in order to enter or continue a program of study at Forsyth Technical Institute Students must be enrolled at least half-time to apply for Work Study

Applications are available at the Financial Aid office throughout the year as long as on-campus job openings exist.

V.A., SOCIAL SECURITY AND D.V.R. BENEFITS

The Institute is approved for the training of persons eligible for benefits under the Veterans Administration, Social Security Commission and Division of Vocational Rehabilitation.

Additional information concerning these benefits is available at the Student Personnel Office or from offices of the above named agencies.

Students receiving V.A. benefits are responsible for learning how to file their reports, for the accuracy of their reports, and for notifying the Veteran's Officer if they withdraw from any class or from school. The Veteran's Officer is on campus Monday and Thursday from 1:00 P.M. until 10:00 P.M. and on Tuesday, Wednesday and Friday from 8:00 A.M. until 5:00 P.M.

ORGANIZATIONS AND ACTIVITIES

STUDENT GOVERNMENT ASSOCIATION

The Student Government Association serves to promote interest in student affairs both on and off campus. The Association is composed of representatives elected from each section of each curriculum by the students of that curriculum. Student Government officers are elected from among the official curriculum representatives by vote of the student body. Faculty members are appointed by the administration to serve in an advisory capacity to the Student Government Association.

STUDENT REPRESENTATION ON BOARDS AND COMMITTEES

The President of the Student Government Association, or his designate, represents the SGA at meetings of the Board of Trustees of the Institute. Student representatives also serve on the Academic Review Committee, the Disciplinary Review Committee, and in some cases on the Curriculum Advisory Committee.

CIRCLE K

The Circle K is a national collegiate service club sponsored by Kiwanis International. The club is open to male and female students who are invited to membership at intervals during the year.

ADMINISTRATIVE MANAGEMENT SOCIETY

The A.M.S., as it is usually called, is a national business club open to students in the field of Business Administration. To be eligible for invitation to membership, a student must have earned a grade point average of 3.0 by the end of the first quarter. Second year students must have maintained an average of 2.5. Membership is by invitation.

SOCIETY OF ENGINEERING STUDENTS

The Society of Engineering Students is a service and social club open to students from the Manufacturing Engineering, and Drafting and Design Engineering Technology programs. This club, in its first years of existence, has raised and set aside funds for endowing a scholarship open to second quarter students in these two fields of technology.

OTHER ORGANIZATIONS

Students are encouraged to affiliate with student chapters of various professional and technical organizations and societies.

ATHLETICS

The Institute does not offer a formal, organized athletic program. The students themselves have organized basketball, softball and bowling teams and compete in Winston-Salem city leagues in these sports. Volunteers from the faculty serve as sponsors and coaches of the teams.

STUDENT PULICATIONS

Students are encouraged to participate actively in the preparation of the F.T.I. *Reporter* and the *Reflector*, the two major student publications.

The F.T.I. *Reporter* is the student newspaper written, edited and managed by the student staff with the assistance of a faculty advisor.

The *Reflector*, the yearbook of the Institute, is written, edited and managed by the student yearbook staff with the assistance of a faculty advisor.

OTHER STUDENT SERVICES

GUIDANCE AND COUNSELING SERVICE

The Office of Student Personnel maintains a staff of trained counselors whose services are available to students needing help with educational, vocational or personal problems.

Each full-time student at the Institute is assigned a faculty advisor who is available for help with problems related to the student's course work. The advisor serves as a direct link between the student and the administrative staff of the Institute.

TESTING

Several individualized special tests and inventories are available for counseling purposes through the Office of Student Personnel. Both students and faculty members may obtain information on their availability and value by contacting any counselor.

HOUSING

Since the Institute has no dormitory facilities, students who wish to live away from home must make their own housing arrangements. The Institute takes no responsibility for locating or supervising student housing; however, suggestions as to location of off-campus housing may be obtained in the Office of Student Personnel.

Students enrolled in health education programs may obtain housing in former nursing school residences at a local hospital. Interested students should inquire before July 1.

HEALTH SERVICES

Limited health services are provided through the Office of Student Personnel and first-aid supplies located in shop areas; however, injuries requiring more than minor first-aid treatment will be treated in the emergency room of a nearby hospital.

For major illness or injury, ambulance transportation is available to either of the two hospitals, both of which are located within two miles of the Institute.

ACCIDENT INSURANCE

Accident insurance covering the hours a student is in school, on field trips, and in traveling to and from school is provided to full-time, day students from student activity fee funds. Insurance claim forms may be obtained from the Institute Business Office.

HOSPITALIZATION INSURANCE

All full-time students below age 26 are eligible to obtain Blue Cross-Blue Shield Group Insurance at special student rates.

FOOD SERVICE

Canteen service is available in the Student Center which is ocated on the ground level of Snyder Hall. A variety of hot and cold food and drink is available from vending machines. Hot lunches are also provided through a catering service from 11:30 a.m. to 1:00 p.m. each day.

STUDENT CENTERS

A large, attractive Student Center is located on the ground level of Snyder Hall. Students are encouraged to use the Center as a place in which to meet, chat, eat and relax. The Center is open from 8 a.m. until 10 p.m., Monday through Thursday, and from 8 a.m. until 5 p.m. on Friday.

A student lounge is also available for students in the health programs in the Allied Health Building.

LIBRARY

Main Campus

The library is located in Snyder Hall and contains reference and circulatory books which are available to all citizens of the area. Additional holdings are being acquired at the rate of approximately 2,500 volumes per year. Also, housed in the library are such audio-visual media as slides, films, filmstrips, tapes, records and microfilm. These media are constantly being added to the library's collection and lend greater variety to available sources of information.

The library is open Monday through Thursday, from 7:30 a.m. until 8:30 p.m. and on Friday from 7:30 a.m. until 4:30 p.m.

Allied Health Building

Students have access to the library in the Allied Health Building.

BOOKSTORE

A school bookstore is operated by the Institute as a service to students, faculty and staff. Textbooks, school supplies and course-related materials, as well as other items of special interest to students, are offered for sale. The bookstore is adjacent to the Student Center in Snyder Hall and is open Monday through Friday from 8:30 a.m. until 3:00 p.m. and on Monday and Thursday evenings from 5:30 p.m. until 8:00 p.m.

LOST AND FOUND SERVICE

Lost and found articles will be handled at the Reception Desk in the 100 Building on the main campus.

PRE-TECHNICAL PROGRAM

For those applicants to degree programs who, on the basis of test results and past performance, do not qualify for immediate admission to their chosen programs of study, non-credit developmental course work is available and is required as a condition of admission. The developmental courses are also open to students who wish to take them for personal benefit.

LEARNING LAB

A student enrolling in a Learning Laboratory sets his own attendance schedule and learns at his own rate. Such a departure from the traditional classroom approach is made possible by individualized instruction, whereby what is to be learned is presented in small steps arranged in logical order. Constant reinforcement, continuous student involvement and immediate feedback produce a low rate of error and a high rate of achievement.

More than a hundred programs and courses are offered in the campus lab and general adult labs situated elsewhere in Forsyth County. Enrollment is free, and the labs are open to anyone at least 18 years of age, provided that the class with which he entered high school has been graduated. Students may enroll anytime.

The labs are used for a variety of reasons: to supplement or reinforce classroom instruction, to prepare for the high school equivalency tests or college entrance examinations, to take courses in the Adult High School Program, for foreign language instruction, and for self-enrichment in other programs.

Instruction is offered through the printed word, audio and video tapes, filmstrips, and teaching machines. A sound module is available to students studying foreign languages or any other course requiring vocal responses.

Lab coordinators and assistants are on hand to assist all students.

HIGH SCHOOL EQUIVALENCY

Adult residents of North Carolina who have not completed high school may earn a Certificate of High School Equivalency by passing a battery of five tests. These tests are known alternately as the high school equivalency test and the GED (General Educational Development) tests.

A Certificate of High School Equivalency is recognized across the nation by most employers and educational institutions.

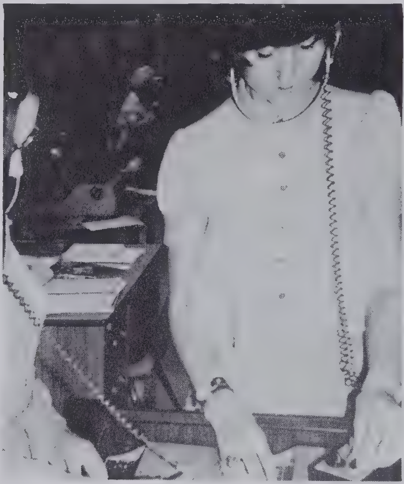
Persons interested in taking the GED tests should apply at the office of their local city or county superintendent of schools or at the Institute's campus Learning Laboratory.

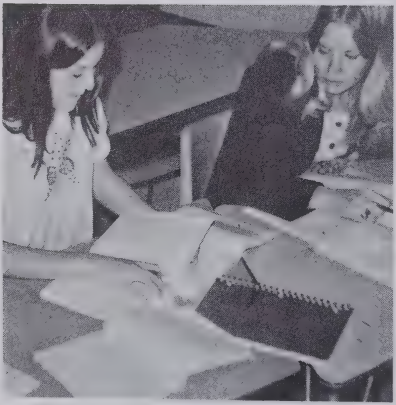
To be eligible to take the tests, an applicant must be at least 19 years old (18 if he has been out of a regular high school program for at least six months) and must currently reside in North Carolina.

Forsyth Technical Institute is one of sixty official GED testing centers in North Carolina and is the only one in Forsyth County. The center administers the tests by appointment. The Institute may be contacted for further information.

CHANGES IN REGULATIONS

Forsyth Technical Institute reserves the right, without prior notice, to make changes in regulations, courses, fees, and other matters of policy and procedure when and as deemed necessary.





ASSOCIATE IN APPLIED SCIENCE DEGREE PROGRAMS

ARCHITECTURAL TECHNOLOGY T-041

The architectural technician is concerned with turning the architect's design sketches into complete and accurate working plans and detail drawings for construction purposes. He may prepare floor plans; elevation drawings; construction details; mechanical equipment layouts; door, room and window schedules; and site plans. The technician will be involved in work requiring a knowledge of building codes, specifications and contract documents.

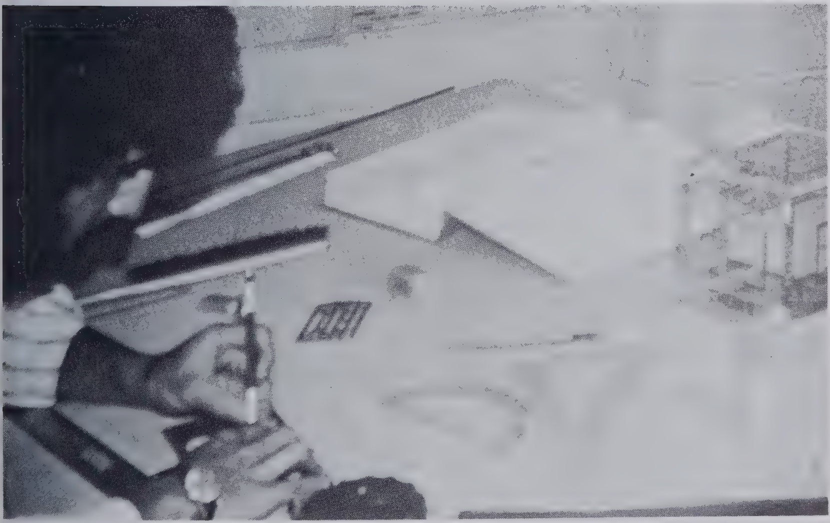
The curriculum was designed in cooperation with the North Carolina Chapter of the American Institute of Architects. It provides the individual with knowledge and skills that will lead to employment in the field of architectural drafting and afford opportunity for rapid advancement in technical knowledge and proficiency.

CURRICULUM BY QUARTERS

Course Title			**Hrs. Per Week**			
			C	**L**	**P**	**QH**
FIRST QUARTER						
MAT	101	Technical Mathematics I	5	0	0	5
ENG	100	Oral Communication	3	0	0	3
DFT	106	Architectural Drafting I	2	0	6	4
DFT	181	History of Architecture and Construction	5	0	0	5
			15	0	6	17
SECOND QUARTER						
MAT	102	Technical Mathematics II	5	0	0	5
ENG	101	Introduction to Written Communication	3	0	0	3
CIV	105	Architectural Materials and Methods	3	2	0	4
DFT	107	Architectural Drafting II	2	0	6	4
			13	2	6	16
THIRD QUARTER						
MAT	103	Technical Mathematics III	5	0	0	5
AHR	106	Architectural Mechanical Equipment	3	0	3	4
PHY	111	Physics: Mechanics	3	2	0	4
DFT	108	Architectural Drafting III	0	0	9	3
			11	2	12	16
FOURTH QUARTER						
MEC	104	Applied Mechanics	5	0	0	5
DFT	150	Site Planning	2	0	6	4
PHY	113	Physics: Electricity	3	2	0	4
ECO	102	Economics	3	0	0	3
			13	2	6	16

Course Title			Hrs. Per Week C	L	P	QH
FIFTH QUARTER						
MEC	205	Strength of Materials	3	2	0	4
DFT	220	Architectural Drafting IV	2	0	9	5
ENG	102	Composition	3	0	0	3
DFT	233	Office Practice Seminar	2	0	0	2
			10	2	9	14
SIXTH QUARTER						
DFT	221	Architectural Drafting V	2	0	9	5
DFT	235	Codes, Specifications, and Contract Documents	3	0	3	4
PSY	206	Applied Psychology	3	0	0	3
ENG	103	Technical Report Writing	3	0	0	3
		Elective	3	0	0	3
			14	0	12	18
SEVENTH QUARTER						
PHY	114	Physics: Light and Sound	3	2	0	4
ISC	201	Industrial Organization and Management	3	0	0	3
DFT	222	Architectural Drafting VI	2	0	9	5
DFT	236	Construction Estimating and Field Inspecting	3	0	3	4
		Elective	3	0	0	3
			14	2	12	19

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit



ASSOCIATE DEGREE NURSING T-059

The curriculum for the Associate Degree in Applied Science in Nursing follows the guidelines as established by the National League of Nursing and the North Carolina State Board of Nursing. Included in the curriculum are liberal arts courses such as English and math. Basic health sciences are included such as anatomy, physiology, microbiology and chemistry to enable the student to acquire a thorough understanding of the human body, its functions, and how diseases and disorders affect it. Courses designed to impart the skills needed by associate degree nurses in the profession are an integral part of the curriculum. Clinical experience will be gained by rotations in the local hospitals. These facilities are Forsyth Memorial Hospital, North Carolina Baptist Hospital, and other community health agencies as needed.

CURRICULUM BY QUARTERS

Suggested sequence of courses

Course Title		**Hrs. Per Week**			
		C	**L**	**P**	**QH**
FIRST QUARTER					
BIO 107	Anatomy and Physiology I	3	2	0	4
NUR 101	Nursing I	4	2	9	8
ENG 101	Introduction to Written Communication	3	0	0	3
MAT 100	Mathematics for Nursing Education	3	0	0	3
		13	4	9	18
SECOND QUARTER					
BIO 108	Anatomy and Physiology II	3	2	0	4
CHM 103	Chemistry — General and Inorganic	3	2	0	4
NUR 102	Nursing II	4	0	12	8
PSY 101	Psychology	3	0	0	3
		13	4	12	19
THIRD QUARTER					
BIO 111	Microbiology	3	2	0	4
NUR 103	Nursing III	4	0	12	8
CHM 104	Organic and Biochemistry	3	2	0	4
ENG 102	Composition	3	0	0	3
		13	4	12	19
FOURTH QUARTER					
SOC 103	Sociology	3	0	0	3
NUR 104	Nursing IV	4	0	12	8
NUR 105	Human Development	3	0	0	3
		10	0	12	14

Course Title			Hrs. Per Week			
			C	L	P	QH
FIFTH QUARTER						
PSY	205	Child Psychology	3	0	0	3
NUR	201	Nursing V	6	0	15	11
			9	0	15	14
SIXTH QUARTER						
NUR	202	Nursing VI	5	0	18	11
NUR	204	Nursing Trends Seminar	2	0	0	2
HIS	111	American History	3	0	0	3
			10	0	18	16
SEVENTH QUARTER						
POL	212	American Government	3	0	0	3
NUR	203	Nursing VII	4	0	24	12
			7	0	24	15

BUSINESS ADMINISTRATION T-018

The distribution of goods has been generally recognized as the largest single problem in business. Techniques for mass production of goods have been perfected, and better ways to get these products to the consumer are needed.

The Business Administration program is designed to (1) develop the student's knowledge of the fundamentals of marketing and distribution and to provide him with an understanding of organization and management (2) develop skills in selling, advertising, and analysis and (3) familiarize the student with growth problems confronting business today.

Jobs available which graduates could fill are in the areas of retailing, wholesaling, industrial marketing, finance, and service industries. Services performed by graduates include sales, advertising, merchandising, buying, credit, and personnel.

CURRICULUM BY QUARTERS

Course Title			**Hrs. Per Week**			
			C	**L**	**P**	**QH**
FIRST QUARTER						
ENG	100	Oral Communication	3	0	0	3
BUS	102	Typewriting I	2	0	3	3
BUS	109	Business Mathematics	5	0	0	5
BUS	101	Introduction to Business	5	0	0	5
			15	0	3	16
SECOND QUARTER						
ENG	101	Introduction to Written Communication	3	0	0	3
BUS	120	Accounting I	4	0	3	5
ECO	102	Economics I	3	0	0	3
BUS	110	Office Machines I	2	0	3	3
			12	0	6	14
THIRD QUARTER						
ENG	102	Composition	3	0	0	3
BUS	115	Business Law I	3	0	0	3
BUS	121	Accounting II	4	0	3	5
ECO	104	Economics II	3	0	0	3
			13	0	3	14
FOURTH QUARTER						
BUS	116	Business Law II	3	0	0	3
EDP	101	Principles of Business Data Processing	3	2	0	4
BUS	229	Taxes	2	0	3	3
BUS	239	Marketing	5	0	0	5
			13	2	3	15

Course Title			Hrs. Per Week C	L	P	QH

FIFTH QUARTER

		Course Title	C	L	P	QH
ENG	205	Business Report Writing	3	0	0	3
BUS	123	Business Finance I	3	0	0	3
BUS	232	Sales Development	3	0	0	3
BUS	271	Office Management	3	0	0	3
PSY	206	Applied Psychology	3	0	0	3
			15	0	0	15

SIXTH QUARTER

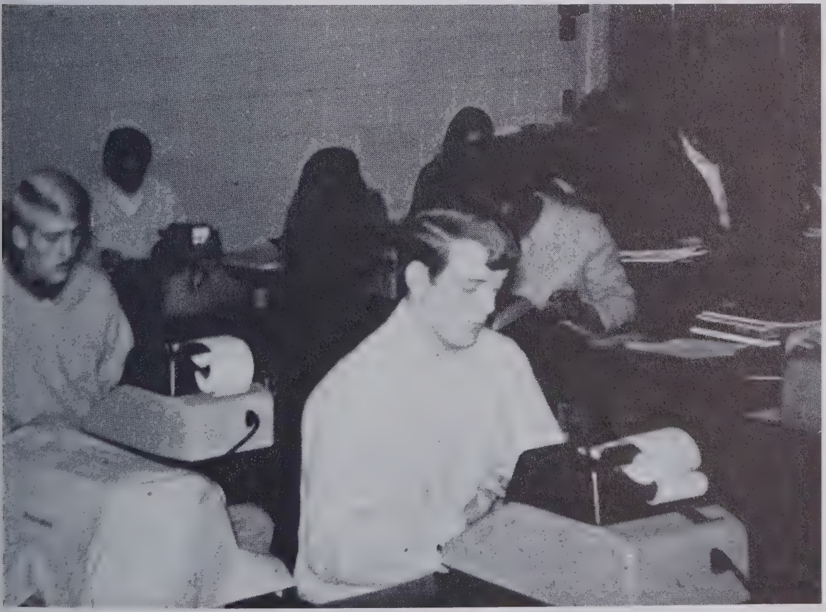
		Course Title	C	L	P	QH
ENG	206	Business Communications	3	0	0	3
BUS	124	Business Finance II	3	0	0	3
BUS	243	Advertising	4	0	0	4
BUS		Elective	6	0	0	6
			16	0	0	16

SEVENTH QUARTER

		Course Title	C	L	P	QH
		Elective*	3	0	0	3
BUS	235	Business Management	3	0	0	3
BUS	272	Principles of Supervision	3	0	0	3
BUS		Elective	6	0	0	6
			15	0	0	15

*Unspecified electives may be any course in any associate degree program provided student meets prerequisites.

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit



EARLY CHILDHOOD SPECIALIST T-073

Early childhood specialists are concerned with providing for infants and young children in a program which will promote the optimal development of each child. The specialist must understand and be able to (1) meet the physical and nutritional needs of pre-school children; (2) provide activities which stimulate intellectual, emotional and social growth of children; (3) guide children in the formation of acceptable habits and attitudes; and (4) assist children in their learning to communicate effectively with others. In addition, the early childhood education specialist must be able to work effectively with parents and, where necessary, provide guidance in improving the child's home experience.

This curriculum is designed to provide the educational preparation of individuals to serve in a variety of roles in facilities concerned with the care and development of infants and young children. It also provides individuals with the knowledge, understanding and skills needed to work effectively with pre-school children in various stages of development.

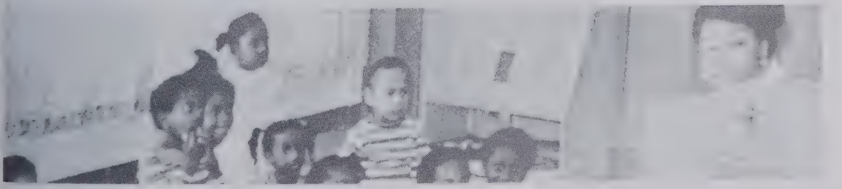
The program is built around the developmental approach which aims for the optimal development of each child. As staffing requirements of both day care and residential facilities increase, graduates of this curriculum should find many different types of jobs available.

CURRICULUM BY QUARTERS

			Hrs. Per Week			
Course Title			**C**	**L**	**P**	**QH**
FIRST QUARTER						
ENG	100	Oral Communication	3	0	0	3
PSY	101	Psychology	3	0	0	3
SOC	104	The Family: A Cross Cultural Survey	3	0	0	3
EDU	101	Child Growth and Development	5	0	0	5
SCI	101	General Science	3	0	0	3
			17	0	0	17
SECOND QUARTER						
ENG	101	Introduction to Written Communication	3	0	0	3
PSY	104	Human Behavior and Learning	3	0	0	3
SOC	105	Families in the American Culture	3	0	0	3
EDU	102	Programming for Young Children	3	2	3	5
HEA	101	Personal Hygiene and Health	2	0	0	2
			14	2	3	16

Course Title			Hrs. Per Week			
			C	L	P	QH
THIRD QUARTER						
ENG	102	Composition	3	0	0	3
PSY	105	Human Growth and Development: Prenatal and Infant	3	0	0	3
SOC	106	The Family in the Community	3	0	0	3
EDU	103	Working with Young Children	4	0	10	5
			13	0	10	14
FOURTH QUARTER						
ENG	103	Technical Report Writing	3	0	0	3
PSY	106	Human Growth and Development: Early Childhood	3	0	0	3
EDU	201	Activities for Young Children: Language Arts and Social Studies	5	0	10	6
SOC	201	The Child and Community Services	3	0	0	3
NUT	102	Nutrition for Young Children	2	0	3	3
			16	0	13	18
FIFTH QUARTER						
ENG	206	Business Communications	3	0	0	3
PSY	201	Human Growth and Development: Middle Childhood and Adolescence	3	0	0	3
EDU	106	Activities for Young Children: Science and Mathematics	5	0	10	6
EDU	104	Art for Young Children	3	0	0	3
			14	0	10	15
SIXTH QUARTER						
		Elective	3	0	0	3
EDU	202	Seminar Co-op in Early Childhood	6	0	10	7
EDU	105	Music for Young Children	3	0	0	3
PSY	202	Human Growth and Development: Adulthood	3	0	0	3
			15	0	10	16
SEVENTH QUARTER						
EDU	204	Parent Education	3	0	0	3
EDU	205	Seminar-Practicum:Special Problems in Early Childhood	5	0	10	6
EDU	203	The Exceptional Child	3	0	0	3
			11	0	10	12

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit



ELECTRONIC DATA PROCESSING—BUSINESS T-022

Computers and information sciences have affected the lives of most Americans, and benefits derived from computers have caused increased demands for personnel in computer science. Because the training of programming personnel on the job is so expensive, there is an increasing demand for the qualified graduate in this area. Such a graduate must think analytically and logically; understand data processing concepts; possess programming skills; and have a knowledge of business, mathematics, accounting, and English sufficient to enable him to use his programming skills effectively.

The Electronic Data Processing Program is designed to train students for employment as computer programmers in business. Students write and test programs in the languages used most widely in business today with particular emphasis placed on COBOL. Students program on up-to-date equipment of the type most used in industry. A study of computer systems and basic systems design and analysis is included.

CURRICULUM BY QUARTERS

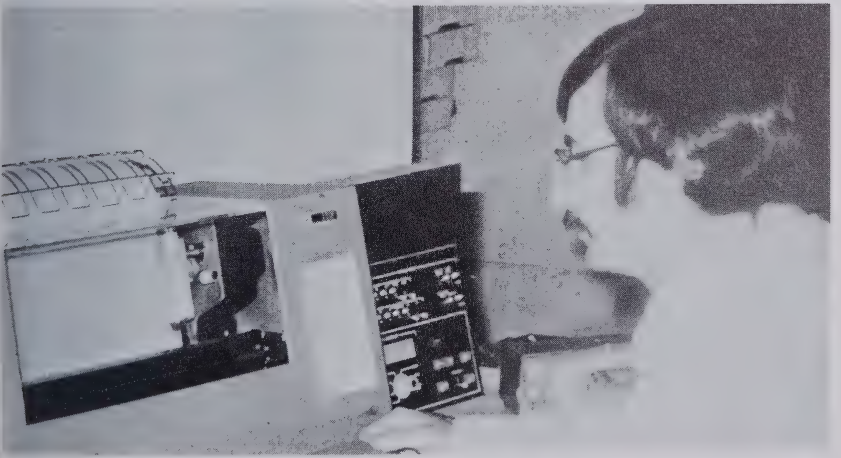
			Hrs. Per Week			
Course Title			**C**	**L**	**P**	**QH**
FIRST QUARTER						
ENG	100	Oral Communication	3	0	0	3
MAT	111	EDP Mathematics I	5	0	0	5
EDP	101	Principles of Data Processing	3	2	0	4
EDP	102	Logic and Decision Making	2	0	3	3
			13	2	3	15
SECOND QUARTER						
BUS	120	Accounting I	4	0	3	5
MAT	112	EDP Mathematics II	5	0	0	5
EDP	105	Assembly Language Programming I	5	2	0	6
			14	2	3	16
THIRD QUARTER						
ENG	101	Introduction to Written Communication	3	0	0	3
BUS	121	Accounting II	4	0	3	5
MAT	116	Statistics	5	0	0	5
EDP	110	COBOL Programming I	3	2	0	4
			15	2	3	17
FOURTH QUARTER						
ENG	102	Composition	3	0	0	3
		EDP Selection	3	2	0	4
EDP	111	COBOL Programming II	2	4	0	4
EDP	201	Computer Systems	3	2	0	4
			11	8	0	15

Course	Title	Hrs. Per Week C	L	P	QH
FIFTH QUARTER					
ENG 206	Business Communications	3	0	0	3
EDP 112	COBOL Programming III	2	4	0	4
EDP 205	Systems Design and Analysis I	3	2	0	4
	EDP Selection	3	2	0	4
		11	8	0	15
SIXTH QUARTER					
	Sociology Elective	3	0	0	3
EDP 206	Systems Design and Analysis II	3	2	0	4
	EDP Selection	3	2	0	4
	Business Elective	3	0	0	3
		12	4	0	14
SEVENTH QUARTER					
ENG 205	Business Report Writing	3	0	0	3
EDP 210	Language Survey	2	0	0	2
EDP 220	Research Project	1	8	0	5
	EDP Selection	3	2	0	4
		9	10	0	14

EDP Selections will be specified by the Institution from the following list of courses:

EDP 260	Functional Wiring Principles	2	2	0	3
EDP 106	Assembly Language Programming II	2	4	0	4
EDP 230	Introduction to FORTRAN	3	2	0	4
EDP 231	Linear Programming	3	2	0	4
EDP 240	PL/1 Programming I	3	2	0	4
EDP 241	PL/1 Programming II	3	2	0	4
EDP 250	RPG Programming	3	2	0	4

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit



ELECTRONICS ENGINEERING TECHNOLOGY T-045

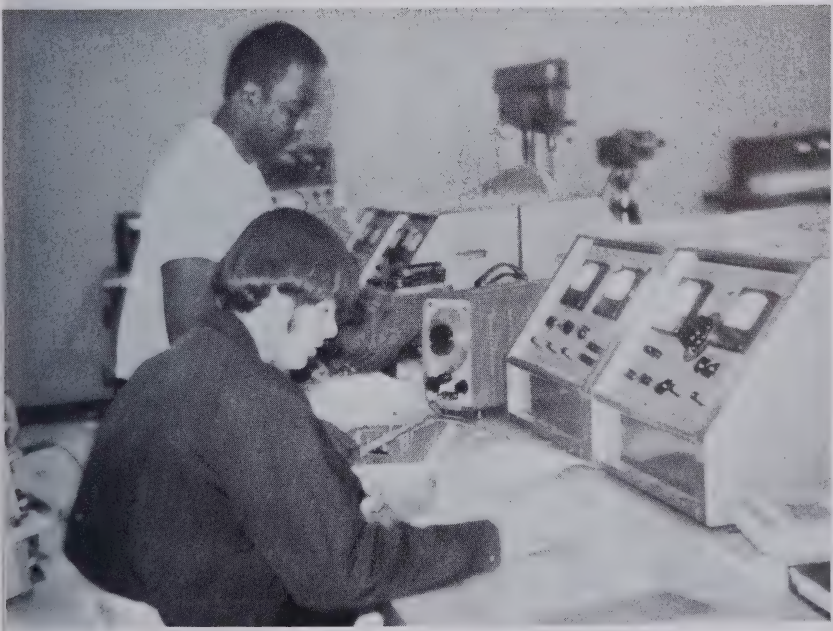
The past decade has seen an electronics invasion into practically every industrial operation because of the development of the integrated circuit. The ever expanding application of these tiny microelectronic devices has produced an industrial revolution in the areas of computers, machine controls, communications, entertainment electronics, space technology and medical electronics. As a result, thousands of new job opportunities have emerged for the electronics technician. The individual who expects to enter this fascinating field must acquire the highly specialized skills and knowledge which will enable him to work with engineers and scientists in developing, constructing and testing all kinds of electronic products. An ECPD accredited curriculum.

CURRICULUM BY QUARTERS

Course Title		**Hrs. Per Week** **C**	**L**	**P**	**QH**
FIRST QUARTER					
MAT 101	Technical Mathematics I	5	0	0	5
ENG 100	Oral Communication	3	0	0	3
ELC 101	Fundamentals of Electricity I	5	2	6	8
		13	2	6	16
SECOND QUARTER					
MAT 102	Technical Mathematics II	5	0	0	5
ENG 101	Introduction to Written Communication	3	0	0	3
ELC 102	Fundamentals of Electricity II	5	2	6	8
		13	2	6	16
THIRD QUARTER					
MAT 103	Technical Mathematics III	5	0	0	5
ENG 102	Composition	3	0	0	3
PHY 111	Physics: Mechanics	3	2	0	4
ELN 105	Control Devices	5	2	6	8
		16	4	6	20
FOURTH QUARTER					
MAT 201	Technical Mathematics IV	5	0	0	5
PHY 112	Physics: Materials and Heat	3	2	0	4
ELN 205	Semi-Conductor Applications I	5	2	6	8
		13	4	6	17
FIFTH QUARTER					
ENG 103	Technical Report Writing	3	0	0	3
ECO 102	Economics	3	0	0	3
ELN 224	Pulse Circuits and Wave Shaping	4	0	6	6
ELN 210	Semi-Conductor Applications II	4	0	6	6
		14	0	12	18

Course Title			Hrs. Per Week C	L	P	QH
SIXTH QUARTER						
DFT	101	Technical Drafting I	2	0	6	4
PSY	206	Applied Psychology	3	0	0	3
ELN	235	Industrial Electronics	3	0	6	5
ELN	240	Digital Fundamentals	4	0	6	6
			12	0	18	18
SEVENTH QUARTER						
PHY	114	Physics: Light and Sound	3	2	0	4
MAT	208	Calculus for Electronics	5	0	0	5
ELN	245	Electronic Design Project	0	0	6	2
ELN	220	Electronic Systems Analysis	4	0	6	6
			12	2	12	17

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit



EXECUTIVE SECRETARIAL SCIENCE T-030

Many individuals are employed in occupations requiring stenographic skills. Practically all secretaries record dictation and transcribe it on the typewriter. Usually they have additional duties related to the nature of the employer's business, and sometimes they have special job titles which reflect skill levels or job specialities. In addition to their stenographic work, secretaries usually relieve employers of routine duties and frequently handle a variety of business details on their own initiative.

The two year program of studies provides instruction in all phases of secretarial work, including the operation of the most up-to-date office machines.

CURRICULUM BY QUARTERS

Course Title		**Hrs. Per Week**			
		C	**L**	**P**	**QH**
FIRST QUARTER					
ENG 100	Oral Communications	3	0	0	3
BUS 109	Business Mathematics	5	0	0	5
ECO 108	Consumer Economics	3	0	0	3
BUS 102	Typewriting I	2	0	3	3
		13	0	3	14
SECOND QUARTER					
ENG 101	Introduction to Written Communications	3	0	0	3
BUS 103	Typewriting II	2	0	3	3
BUS 106	Shorthand I	3	0	3	4
BUS 110	Office Machines I	2	0	3	3
		10	0	9	13
THIRD QUARTER					
ENG 102	Composition	3	0	0	3
BUS 104	Typewriting III	2	0	3	3
BUS 107	Shorthand II	3	0	3	4
BUS 120	Accounting I	4	0	3	5
		12	0	9	15
FOURTH QUARTER					
BUS 108	Shorthand III	3	0	3	4
BUS 105	Typewriting IV	2	0	3	3
BUS 115	Business Law	3	0	0	3
BUS 211	Office Machines II	2	0	3	3
ENG 205	Report Writing	3	0	0	3
		13	0	9	16

Course Title			Hrs. Per Week C	L	P	QH
FIFTH QUARTER						
BUS	206	Dictation-Transcription I	3	0	3	4
BUS	113	Vocabulary/Terminology I	3	0	0	3
EDP	101	Principles of Business Data Processing	3	2	0	4
ENG	206	Business Communications	3	0	0	3
PSY	112	Personality Development	3	0	0	3
			15	2	3	17
SIXTH QUARTER						
BUS	207	Dictation-Transcription II	3	0	3	4
BUS	214	Secretarial Procedures	4	0	6	6
BUS	213	Filing	3	0	0	3
BUS		Elective	3	0	0	3
			13	0	9	16
SEVENTH QUARTER						
SOC	103	Sociology	3	0	0	3
BUS	208	Dictation-Transcription III	3	0	3	4
BUS	272	Principles of Supervision	3	0	0	3
BUS	219	Office Applications	2	0	12	6
			11	0	15	16

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit

EXECUTIVE SECRETARIAL SCIENCE—MACHINE TRANSCRIPTION OPTION—T033

This course of study is very similar to the Executive Secretarial Science curriculum with one major difference. There is no shorthand offered in this program. In its place are several courses which will prepare these students for handling machine transcription. In many offices shorthand is not used, and in others machine transcription serves the purposes of the employer. In addition, students in this option get two quarters of accounting, a quarter of economics, and a course in vocabulary and terminology which is new in business offerings.

CURRICULUM BY QUARTERS

Course Title			**Hrs. Per Week**			
			C	**L**	**P**	**QH**
FIRST QUARTER						
ENG	100	Oral Communications	3	0	0	3
BUS	109	Business Mathematics	5	0	0	5
ECO	108	Consumer Economics	3	0	0	3
BUS	102	Typewriting I	2	0	3	3
			13	0	3	14
SECOND QUARTER						
ENG	101	Introduction to Written Communications	3	0	0	3
BUS	103	Typewriting II	2	0	3	3
BUS	110	Office Machines I	2	0	3	3
BUS	120	Accounting I	4	0	3	5
			11	0	9	14
THIRD QUARTER						
ENG	102	Composition	3	0	0	3
BUS	104	Typewriting III	2	0	3	3
BUS	211	Office Machines II	2	0	3	3
BUS	121	Accounting II	4	0	3	5
			11	0	9	14
FOURTH QUARTER						
BUS	105	Typewriting IV	2	0	3	3
BUS	115	Business Law I	3	0	0	3
ENG	205	Report Writing	3	0	0	3
ECO	102	Economics	3	0	0	3
BUS	232	Sales Development	3	0	0	3
			14	0	3	15

Course Title			Hrs. Per Week C	L	P	QH
FIFTH QUARTER						
BUS	112	Techniques of Machine Transcription	2	0	3	3
PSY	112	Personality Development	3	0	0	3
ENG	206	Business Communications	3	0	0	3
EDP	101	Principles of Business Data Processing	3	2	0	4
BUS	113	Vocabulary/Terminology I	3	0	0	3
			14	2	3	16
SIXTH QUARTER						
PSY	206	Applied Psychology	3	0	0	3
BUS	214	Secretarial Procedures	4	0	6	6
BUS	213	Filing	3	0	0	3
BUS	212	Machine Transcription	2	0	3	3
BUS	114	Vocabulary/Terminology II	3	0	0	3
			15	0	9	18
SEVENTH QUARTER						
SOC	103	Sociology	3	0	0	3
BUS	215	Machine Transcription	2	0	3	3
BUS	272	Principles of Supervision	3	0	0	3
BUS		Elective	6	0	0	6
			14	0	3	15

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit

FIRE SCIENCE TECHNOLOGY T-063

The rapidly developing age of scientific developments changes the ways of man and continually brings about a need for further changes. The public fire service is no exception. New chemicals that are volatile, pyrophonic, radioactive, and explosive are being transported and stored in every section of North Carolina.

Modern fire service requires intelligent, courageous, and dedicated men. They must be willing to keep pace with the rapid technical changes and be able to cope with new problems that confront them. This is necessary not only to save the lives of others but also their own.

Rising cost and the increased demands on governmental budgets require more efficient use of available funds, equipment, and manpower. The curriculum is designed to enable the individual to draw from a vast store of technical and professional knowledge to make decisions effectively both on and off the emergency scene. In this manner he may assist the economic life of the community through improved services to the public.

Through technical education, the individual requires specialized knowledge of this vital field of public service and develops specific competencies for the performance of fire service administrative and supervisory duties. The curriculum includes areas such as the scientific understanding of fire hazards and their control and general courses that prepare him to work harmoniously with people.

CURRICULUM BY QUARTERS

Suggested sequence of courses

Course Title			**Hrs. Per Week**			
			C	**L**	**P**	**QH**
FIRST QUARTER						
ENG	100	Oral Communications	3	0	0	3
PHY	111	Physics: Mechanics	3	2	0	4
MAT	101	Technical Mathematics	5	0	0	5
FIP	115	Fire Prevention Programs	3	0	0	3
FIP	101	Introduction to Fire Protection Hazards	3	0	0	3
			17	2	0	18
SECOND QUARTER						
ENG	101	Introduction to Written Communications	3	0	0	3
PSY	206	Applied General Psychology	3	0	0	3
BUS	272	Principles of Supervision	3	0	0	3
FIP	211	Grading of Fire Defenses	3	0	0	3
FIP	102	Municipal Fire Protection	3	0	0	3
			15	0	0	15

Course Title			Hrs. Per Week C	L	P	QH
THIRD QUARTER						
ENG	102	Composition	3	0	0	3
FIP	105	Applied Electricity for Fire Protection	3	2	0	4
DFT	118	Drafting and Blueprint Interpretation	0	6	0	2
FIP	120	Municipal Finance	5	0	0	5
FIP	135	Training Programs and Methods of Instruction	3	0	0	3
			14	8	0	17
FOURTH QUARTER						
ENG	103	Technical Report Writing	3	0	0	3
CHM	101	Chemistry	4	2	0	5
FIP	201	Fire Detection and Investigation	3	0	0	3
FIP	103	Construction Codes and Material Rating	2	2	0	3
FIP	230	Hydraulics and Water Distribution Systems	3	2	0	4
			15	6	0	18
FIFTH QUARTER						
		Social Science Elective	3	0	0	3
FIP	220	Fire Fighting Strategy	3	2	0	4
FIP	218	Chemistry of Hazardous Materials	3	2	0	4
FIP	231	Sprinkler and Standpipe Systems	3	2	0	4
FIP	208	Municipal Public Relations	3	0	0	3
		*Technical Elective	3	0	0	3
			18	6	0	21
SIXTH QUARTER						
		Social Science Elective	3	0	0	3
FIP	235	Inspection Principles and Practices	3	4	0	5
FIP	245	Automatic Alarm and Extinguishing System	3	2	0	4
BUS	233	Personnel Management	3	0	0	3
FIP	225	Fire Protection Law	3	0	0	3
			15	6	0	18

*Technical elective may be any course in any associate degree program provided student meets prerequisites.

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit

MANUFACTURING ENGINEERING TECHNOLOGY
T-050

This field is perhaps one of the most promising ones that a student with an interest in science and mechanics may enter in our modern technical world. The demand for trained technicians has exceeded the supply for many years, and every indication is that this situation will continue. This two year program prepares the student for employment as an engineering assistant in such fields as quality control, plant layout, methods and time study, metallurgy, technical sales, and management. Job opportunities exist in industry, civil service, military service, insurance, and the consulting fields.

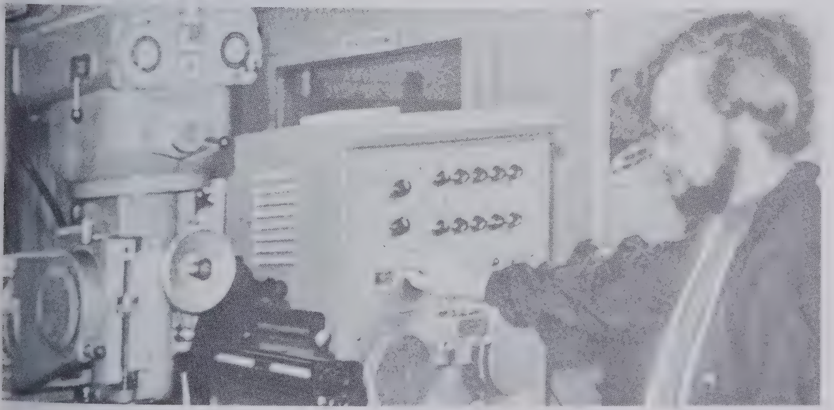
The Manufacturing Engineering Technology program combines academic courses with laboratory and shop practice. An extensive machine shop, a well equipped material testing laboratory, as well as chemistry and physics laboratories, insure that actual job techniques will be practiced. An ECPD accredited curriculum.

CURRICULUM BY QUARTERS

		Hrs. Per Week			
Course Title		**C**	**L**	**P**	**QH**
FIRST QUARTER					
MAT 101	Technical Mathematics I	5	0	0	5
ENG 100	Oral Communication	3	0	0	3
DFT 101	Technical Drafting I	2	0	6	4
MEC 101	Machine Processes I	1	0	6	3
MEC 192	Orientation to Manufacturing Engineering Technology	1	0	0	1
		12	0	12	16
SECOND QUARTER					
MAT 102	Technical Mathematics II	5	0	0	5
ENG 101	Introduction to Written Communication	3	0	0	3
PHY 111	Physics: Mechanics	3	2	0	4
DFT 102	Technical Drafting II	2	0	6	4
MEC 102	Machine Processes II	1	0	6	3
		14	2	12	19
THIRD QUARTER					
MAT 103	Technical Mathematics III	5	0	0	5
ENG 102	Composition	3	0	0	3
MEC 201	Manufacturing Processes I	1	0	6	3
PHY 112	Physics: Materials and Heat	3	2	0	4
		12	2	6	15

Course Title			Hrs. Per Week			
			C	L	P	QH
FOURTH QUARTER						
MEC	104	Applied Mechanics	5	0	0	5
MEC	210	Ferrous Metallurgy	3	0	3	4
MEC	235	Fluid Power	3	0	3	4
MAT	160	Engineering Computations	1	0	3	2
			12	0	9	15
FIFTH QUARTER						
ELC	205	Applied Electricity	3	2	0	4
MEC	205	Strength of Materials	3	2	0	4
MEC	211	Non-Ferrous Metallurgy and Heat Treatment	3	0	3	4
MEC	202	Manufacturing Processes II	2	0	6	4
ECO	102	Economics	3	0	0	3
			14	4	9	19
SIXTH QUARTER						
PSY	206	Applied Psychology	3	0	0	3
ISC	202	Quality Control	3	2	0	4
MEC	237	Control Systems	3	2	0	4
ISC	201	Industrial Organization and Management	3	0	0	3
ISC	203	Motion and Time Study	3	2	0	4
			15	6	0	18
SEVENTH QUARTER						
ISC	209	Plant Layout	3	2	0	4
ENG	103	Technical Report Writing	3	0	0	3
MEC	230	Plant Services	3	2	0	4
PLA	101	Introduction to Plastics	2	0	3	3
MEC	203	Welding Processes	2	0	3	3
			13	4	6	17

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit



MARKETING AND RETAILING T-020

Marketing and retailing is a program which teaches students the techniques of marketing, management, and distribution which are used in many businesses. The program is designed to give the student a chance to learn the theoretical, as well as practical aspects of occupations at the mid-management level. Retailing occupations are those followed by workers engaged in marketing or merchandising activities or in contact with buyers and sellers when (1) distributing to consumers, retailers, jobbers, wholesalers, and others the products of farm and industry or selling services, or (2) managing, operating, or conducting retail, wholesale, or service businesses. Distribution pertains to business and consumer services. Occupations are many and diverse, ranging from stock clerk to the head of a giant distribution-oriented corporation. Thus there are hundreds of entry occupations in this field.

CURRICULUM BY QUARTERS

		Hrs. Per Week			
Course Title		C	L	P	QH
FIRST QUARTER					
ENG 100	Oral Communications	3	0	0	3
BUS 100	Rapid Calculations	3	0	0	3
BUS 245	Retailing	3	0	0	3
BUS 239	Marketing	5	0	0	5
BUS 102	Typewriting	2	0	3	3
		16	0	3	17
SECOND QUARTER					
ENG 101	Introduction to Written Communications	3	0	0	3
BUS 120	Accounting I	4	0	3	5
BUS 237	Wholesaling	3	0	0	3
ECO 102	Economics I	3	0	0	3
BUS 109	Business Mathematics	5	0	0	5
		18	0	3	19
THIRD QUARTER					
ENG 102	Composition	3	0	0	3
BUS 110	Office Machines	2	0	3	3
BUS 115	Business Law I	3	0	0	3
BUS 232	Sales Development	3	0	0	3
ECO 104	Economics II	3	0	0	3
		14	0	3	15
FOURTH QUARTER					
BUS 234	Advanced Sales	3	0	0	3
BUS 241	Social Stratification	3	0	0	3
BUS 116	Business Law II	3	0	0	3
ECO 108	Consumer Economics	3	0	0	3
ENG 206	Business Communications	3	0	0	3
		15	0	0	15

Course Title			**Hrs. Per Week**			
			C	**L**	**P**	**QH**
FIFTH QUARTER						
BUS	272	Principles of Supervision	3	0	0	3
PSY	102	General Psychology	5	0	0	5
EDP	101	Principles of Business Data Processing	3	0	3	4
BUS	243	Advertising	4	0	0	4
			—	—	—	—
			15	0	3	16
SIXTH QUARTER						
BUS	240	Credit Procedures	3	0	0	3
BUS	242	Display and Design	3	2	0	4
BUS	262	Fashion Merchandising	3	2	0	4
BUS	123	Business Finance I	3	0	0	3
PSY	206	Applied Psychology	3	0	0	3
			—	—	—	—
			15	4	0	17
SEVENTH QUARTER						
BUS	244	Marketing Research	4	2	0	5
PSY	112	Personality Development	3	0	0	3
BUS	249	Marketing - Retailing Seminar	3	0	12	7
			—	—	—	—
			10	2	12	15

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit

MECHANICAL DRAFTING AND DESIGN ENGINEERING TECHNOLOGY T-043

Drafting is the language of industrial production, and draftsmen and designers are the language experts in this field. The technical draftsman is responsible for the design and graphical representation of the processes and materials of production. Individuals employed in this field are expected to use creative imagination in the design of tools, machines and machine parts which will facilitate production of goods. This rapidly expanding field offers opportunities which compare favorably with those in any other technical area.

The Drafting and Design program provides the students with an extensive background in the fundamentals of drafting and an understanding of the application of these principles to the design of machines, tools, dies, fixtures, cams, and gears. The course also provides a knowledge of manufactured products, and valuable information for those interested in selling metal products. Emphasis is placed upon the ability to think and plan, and not merely upon drafting techniques. An ECPD accredited curriculum.

CURRICULUM BY QUARTERS

		Hrs. Per Week			
Course Title		**C**	**L**	**P**	**QH**
FIRST QUARTER					
DFT 101	Technical Drafting I	2	0	6	4
MAT 101	Technical Mathematics I	5	0	0	5
MEC 101	Machine Processes I	1	0	6	3
ENG 100	Oral Communication	3	0	0	3
DFT 192	Orientation to Design Drafting	1	0	0	1
		12	0	12	16
SECOND QUARTER					
DFT 102	Technical Drafting II	2	0	6	4
MAT 102	Technical Mathematics II	5	0	0	5
MEC 102	Machine Processes II	1	0	6	3
PHY 111	Physics: Mechanics	3	2	0	4
ENG 101	Introduction to Written Communication	3	0	0	3
		14	2	12	19
THIRD QUARTER					
DFT 103	Technical Drafting III	2	0	6	4
MAT 103	Technical Mathematics III	5	0	0	5
PHY 112	Physics: Materials and Heat	3	2	0	4
ENG 102	Composition	3	0	0	3
MEC 201	Manufacturing Processes I	1	0	6	3
		14	2	12	19

Course Title			Hrs. Per Week			
			C	L	P	QH
FOURTH QUARTER						
DFT	205	Design Drafting I	2	0	6	4
DFT	260	Dimensioning & Tolerancing	1	0	3	2
MEC	104	Applied Mechanics	5	0	0	5
MEC	210	Ferrous Metallurgy	3	0	3	4
MEC	235	Fluid Power	3	0	3	4
			14	0	15	19
FIFTH QUARTER						
DFT	204	Descriptive Geometry	3	0	3	4
DFT	206	Design Drafting II	2	0	6	4
MEC	205	Strength of Materials	3	2	0	4
ELC	205	Applied Electricity	3	2	0	4
			11	4	9	16
SIXTH QUARTER						
DFT	223	Design Drafting III	3	0	6	5
DFT	211	Mechanisms	3	0	3	4
ENG	103	Technical Report Writing	3	0	0	3
MEC	237	Control Systems	3	2	0	4
			12	2	9	16
SEVENTH QUARTER						
DFT	212	Jig & Fixture Design	3	0	6	5
DFT	224	Product Design	2	0	6	4
PSY	206	Applied Psychology	3	0	0	3
ISC	201	Industrial Organization & Management	3	0	0	3
			11	0	12	15

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit

NUCLEAR MEDICINE TECHNOLOGY T-104

Nuclear Medicine, the discipline concerned with the diagnosis, treatment and clinical investigation of disease utilizing internally administered radioisotopes and sophisticated electronic detecting equipment, is one of the most useful and rapidly growing branches of modern medicine.

The student is trained to perform all clinical nuclear medicine procedures and is provided with the basic background in physics, anatomy, physiology, mathematics, radiobiology, instrumentation, electronics and radiopharmaceuticals essential to the performance of work of superior quality.

Bowman Gray School of Medicine, North Carolina Baptist Hospital and Forsyth Memorial Hospital will provide the clinical experience for degree requirements.

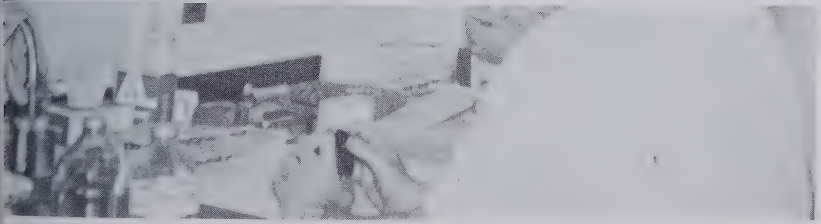
CURRICULUM BY QUARTERS

Suggested sequence of courses

Course Title			**Hrs. Per Week**			
			C	**L**	**P**	**QH**
FIRST QUARTER						
BIO	107	Anatomy and Physiology I	3	2	0	4
CHM	103	Chemistry — General and Inorganic	3	2	0	4
ENG	100	Oral Communication	3	0	0	3
MAT	113	Mathematics I	3	0	0	3
BIO	115	Medical Terminology I	1	0	0	1
NMT	101	Nuclear Medicine Technology I	1	0	0	1
			14	4	0	16
SECOND QUARTER						
BIO	108	Anatomy and Physiology II	3	2	0	4
ENG	101	Introduction to Written Communication	3	0	0	3
CHM	104	Organic and Biochemistry	3	2	0	4
MAT	114	Mathematics II	3	0	0	3
PHY	101	Concepts in Physics	3	0	0	3
BIO	116	Medical Terminology II	1	0	0	1
NMT	102	Nuclear Medicine Technology II	1	0	0	1
			17	4	0	19
THIRD QUARTER						
BIO	169	Fundamentals of Disease Processes	4	0	0	4
PHY	102	Electricity and Electronics	3	0	0	3
PSY	169	Social Psychology of Health & Illness	4	0	0	4
BIO	139	Topographical Anatomy	2	0	0	2
NMT	103	Nuclear Medicine Technology III	1	0	0	1
			14	0	0	14

Course Title		Hrs. Per Week C	L	P	QH
FOURTH QUARTER					
MAT 116	Statistics	5	0	0	5
NMT 125	Film Processing	1	2	0	2
NMT 104	Nuclear Medicine Technology IV	2	0	0	2
NMT 129	Practicum I	0	0	12	4
PHY 103	Modern Physics	2	0	0	2
		10	2	12	15
FIFTH QUARTER					
NMT 116	Nuclear Physics	2	0	0	2
NMT 111	Principles of Nuclear Medicine I	2	0	0	2
NMT 268	Open Lab Practicum I	0	0	6	2
NMT 269	Practicum II	0	0	30	10
		4	0	36	16
SIXTH QUARTER					
NMT 117	Health Physics	1	0	0	1
NMT 221	Principles of Nuclear Medicine II	2	0	0	2
NMT 223	Radiopharmaceuticals I	2	0	0	2
NMT 230	Nuclear Medicine Instrumentation I	3	2	0	4
NMT 273	Open Lab Practicum II	0	0	6	2
NMT 274	Practicum III	0	0	30	10
		8	2	36	21
SEVENTH QUARTER					
NMT 233	Radiopharmaceuticals II	2	0	0	2
NMT 240	Nuclear Medicine Instrumentation II	3	2	0	4
NMT 231	Principles of Nuclear Medicine III	2	0	0	2
NMT 278	Open Lab Practicum III	0	0	6	2
NMT 279	Practicum IV	0	0	30	10
NMT 289	Radiobiology	2	0	0	2
		9	2	36	22
EIGHTH QUARTER					
NMT 241	Principles of Nuclear Medicine IV	2	0	0	2
NMT 256	Introduction to Radioimmunoassay	1	2	0	2
NMT 283	Open Lab Practicum IV	0	0	6	2
NMT 284	Practicum V	0	0	30	10
NMT 290	Nuclear Medicine Technology Seminar	2	0	0	2
		5	2	36	18

-Class
-Lab
-Shop
QH-Quarter Hours Credit



ORNAMENTAL HORTICULTURE T-009

The modern emphasis on outdoor living has created a greater interest in the use of ornamental plants in today's beauty-conscious society. The increased awareness of the value of ornamental plants in landscaping by government, industry, and home-owners has produced a greater demand for trained horticulture technicians.

The Ornamental Horticulture program is designed to give students a good understanding of principles, techniques, and skills which are a necessary foundation for the independent, creative thinking essential to success in this field. Successful completion of this program should qualify individuals for employment in supervision of nurseries and plantings, greenhouse operation, work related to processing and distribution, management of garden shops, supervision or maintenance of golf courses and sale of horticulture products.

CURRICULUM BY QUARTERS

			Hrs. Per Week			
Course Title			**C**	**L**	**P**	**QH**
FIRST QUARTER						
ENG	100	Oral Communication	3	0	0	3
AGR	185	Soil Science and Fertilizer	5	2	0	6
CHM	101	Chemistry	4	2	0	5
AGR	254	Plant Propagation	3	2	0	4
			15	6	0	18
SECOND QUARTER						
ENG	101	Introduction to Written Communication	3	0	0	3
AGR	170	Plant Science	4	2	0	5
AGR	201	Agricultural Chemicals	4	2	0	5
BUS	102	Typing I	2	0	3	3
			13	4	3	16
THIRD QUARTER						
ENG	102	Composition	3	0	0	3
AGR	140	Home Maintenance	2	4	0	4
AGR	151	Plant Materials I	3	4	0	5
AGR	258	Turf Practices	3	4	0	5
			11	12	0	17
FOURTH QUARTER						
AGR	152	Plant Materials II	3	4	0	5
AGR	256	Nursery Management I	2	4	0	4
AGR	251	Landscape Gardening I	3	4	0	5
ENG	103	Technical Report Writing	3	0	0	3
			11	12	0	17

Course Title			Hrs. Per Week			
			C	L	P	QH
FIFTH QUARTER						
AGR	257	Nursery Management II	2	4	0	4
AGR	252	Landscape Gardening II	3	4	0	5
MAT	110	Business Mathematics	5	0	0	5
AGR	259	Garden Center Management	1	2	0	2
			11	10	0	16
SIXTH QUARTER						
AGR	200	Practicum	0	0	30	3
AGR	210	Field Analysis	5	0	0	5
AGR	220	Vegetable and Flower Gardening	4	0	0	4
			9	0	30	12
SEVENTH QUARTER						
AGR	153	Greenhouse Management	3	2	0	4
AGR	145	Entomology & Pathology	3	4	0	5
AGR	240	Landscape Construction	4	2	0	5
ECO	102	Economics	3	0	0	3
			13	8	0	17

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit

POLICE SCIENCE TECHNOLOGY T-064

Police agencies today are moving toward a professional status and law enforcement techniques have evolved from simple jobs requiring minimal qualifications to highly complex activities requiring a great capacity for highly specialized knowledge.

Police officers, both men and women, are charged with the responsibility of protecting life and property. Their responsibilities include preserving the peace, preventing criminal acts, enforcing the law, and apprehending the offenders.

Many opportunities are available for qualified individuals to enter police work. However, future opportunities may be determined to a greater degree by technological and scientific changes in the ever widening scope of law enforcement services.

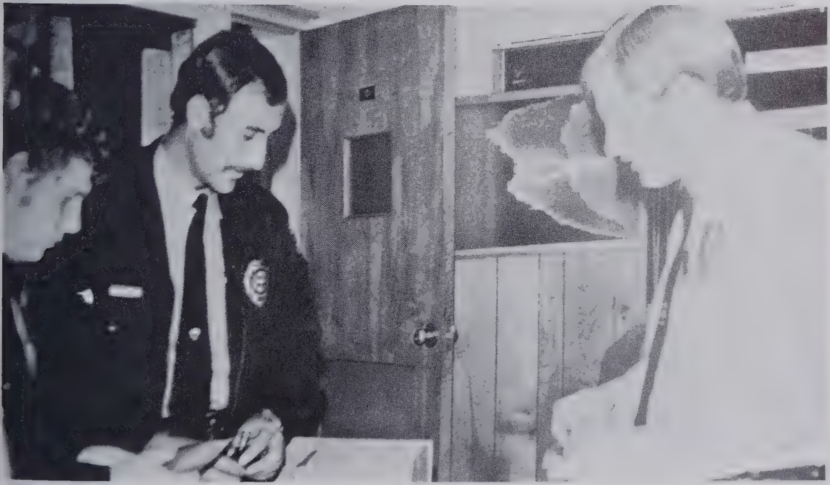
The Police Science Technology program is designed to instruct the student in current law enforcement methods and in the behavioral sciences. It also provides a firm base of general education, including biology, mathematics, and language skills in developing proficiency in leadership necessary for employment at the operational or management level.

CURRICULUM BY QUARTERS

			Hrs. Per Week			
Course Title			**C**	**L**	**P**	**QH**
FIRST QUARTER						
MAT	115	Fundamental Concepts of Mathematics	3	0	0	3
PSC	101	Introduction to Law Enforcement	5	0	0	5
PSY	102	General Psychology	5	0	0	5
SOC	102	Principles of Sociology	5	0	0	5
			18	0	0	18
SECOND QUARTER						
ENG	100	Oral Communications	3	0	0	3
POL	102	Government — National	5	0	0	5
PSC	220	Police Organization & Administration	5	0	0	5
SOC	209	Social Problems	3	0	0	3
			16	0	0	16
THIRD QUARTER						
ENG	101	Introduction to Written Communications	3	0	0	3
POL	103	Government — State	5	0	0	5
PSC	120	Administration of Justice	3	0	0	3
BIO	101	General Biology I	3	2	0	4
			14	2	0	15

Course Title			Hrs. Per Week			
			C	**L**	**P**	**QH**
FOURTH QUARTER						
ENG	102	Composition	3	0	0	3
PSC	110	Police Role in Crime and Delinquency	5	0	0	5
BIO	102	General Biology II	3	2	0	4
BUS	102	Typewriting	2	0	3	3
			13	2	3	15
FIFTH QUARTER						
ENG	103	Report Writing	3	0	0	3
PSY	207	Social Psychology	5	0	0	5
PSC	115	Criminal Law	5	0	0	5
SOC	210	Minorities in American Society	3	0	0	3
			16	0	0	16
SIXTH QUARTER						
ENG	115	Appreciation of Literature	3	0	0	3
PSC	116	Criminal Law II	5	0	0	5
PSC	210	Criminalistics I	3	2	0	4
PHI	101	Philosophy	3	0	0	3
			14	2	0	15
SEVENTH QUARTER						
MAT	116	Fundamental Concepts of Statistics	5	0	0	5
PSC	211	Criminalistics II	3	2	0	4
PSY	105	Abnormal Psychology	5	0	0	5
			13	2	0	14

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit



RADIOLOGIC TECHNOLOGY T-061

During the first three quarters of Radiologic Technology training, the student will participate in a Core Curriculum for Allied Health Students. In this Core Curriculum, emphasis is placed upon the basic sciences and their relationship to the various fields of the medical profession.

Upon completion of this Core Curriculum, the student will begin a specialized study in the field of Radiologic Technology. Each student receives extensive training in the clinical use of ionizing radiation for diagnosis and treatment of injury and disease. The student will become proficient in the operation of all types of radiographic equipment and will gain a thorough knowledge of accessories and photographic principles to produce high quality radiographs. This knowledge is applied as a planned learning experience under the supervision of staff technologists and clinical instructors at North Carolina Baptist Hospital and Forsyth Memorial Hospital.

CURRICULUM BY QUARTERS

Suggested sequence of courses

			Hrs. Per Week			
Course Title			**C**	**L**	**P**	**QH**
FIRST QUARTER						
BIO	107	Anatomy and Physiology I	3	2	0	4
CHM	103	Chemistry — General and Inorganic	3	2	0	4
ENG	100	Oral Communication	3	0	0	3
MAT	113	Mathematics	3	0	0	3
BIO	115	Medical Terminology I	1	0	0	1
			13	4	0	15
SECOND QUARTER						
BIO	108	Anatomy and Physiology II	3	2	0	4
ENG	101	Introduction to Written Communication	3	0	0	3
MAT	114	Mathematics	3	0	0	3
BIO	116	Medical Terminology II	1	0	0	1
CHM	104	Organic and Biochemistry	3	2	0	4
RDT	113	Departmental Orientation and Ethics and Elementary Radiation Protection	1	0	3	2
			14	4	3	17
THIRD QUARTER						
BIO	169	Fundamentals of Disease Processes	4	0	0	4
PSY	169	Social Psychology of Health and Illness	4	0	0	4
BIO	139	Topographical Anatomy	2	0	0	2
HEA	116	Fundamentals of Patient Care	2	0	0	2
RDT	114	Basic Essentials of Radiologic Technology	2	0	6	4
PHY	101	Concepts in Physics	3	0	0	3
			17	0	6	19

Course Title		Hrs. Per Week			
		C	L	P	QH
FOURTH QUARTER					
RDT 139	Positioning and Related Anatomy I	3	0	0	3
RDT 125	Radiographic Darkroom	2	0	0	2
RDT 137	Radiographic Technique I	3	0	0	3
RDT 116	Radiographic Terminology	1	0	0	1
RDT 138	Practicum I	0	0	30	10
RDT 161	Open Lab Practicum I	0	0	6	2
		9	0	36	21
FIRTH QUARTER					
RDT 289	Film Critique I	1	0	0	1
RDT 260	Pediatric Radiography	1	0	0	1
RDT 259	Positioning and Related Anatomy II	3	0	0	3
RDT 238	Practicum II	0	0	30	10
RDT 216	Radiation Physics	3	0	0	3
RDT 237	Radiographic Technique II	3	0	0	3
RDT 262	Open Lab Practicum II	0	0	6	2
		11	0	36	23
SIXTH QUARTER					
RDT 280	Dental Radiography	1	0	0	1
RDT 290	Film Critique II	2	0	0	2
RDT 220	Operating Room Radiography	1	0	0	1
RDT 269	Positioning and Related Anatomy III	3	0	0	3
RDT 249	Radiation Protection	1	0	0	1
RDT 275	TV and Monitor Systems	1	0	0	1
RDT 263	Open Lab Practicum III	0	0	6	2
RDT 248	Practicum III	0	0	30	10
		9	0	36	21
SEVENTH QUARTER					
RDT 276	Equipment Maintenance	1	0	0	1
RDT 291	Film Critique III	2	0	0	2
RDT 204	Nuclear Medicine	2	0	0	2
RDT 258	Practicum IV	0	0	30	10
RDT 283	Radiographic Pathology	2	0	0	2
RDT 233	Seminar I	1	0	0	1
RDT 250	Special Procedures I	2	0	0	2
RDT 264	Open Lab Practicum IV	0	0	6	2
		10	0	36	22
EIGHTH QUARTER					
RDT 257	Departmental Administration	1	0	0	1
RDT 292	Film Critique IV	2	0	0	2
RDT 268	Practicum V	0	0	30	10
RDT 281	Radiation Therapy	2	0	0	2
RDT 234	Seminar II	1	0	0	1
RDT 252	Special Procedures II	2	0	0	2
RDT 265	Open Lab Practicum V	0	0	6	2
RDT 266	Clinical Internship**	0	0	15	2
		8	0	51	22

**This is a special course that will be taken for the three (3) weeks following the end of the Eighth Quarter. Students will register for the course during the regular Eighth Quarter Registration.

REAL ESTATE T-127

Real estate, a major business activity in North Carolina, is much broader and more complex than is commonly realized.

The field of real estate involves helping people find satisfactory homes and helping industry find profitable locations; it includes the planning and developing necessary to make the highest and best use of land and buildings. Other aspects of the industry include the appraising and the managing of real property and finding capital for construction and rehabilitation.

The man or woman entering the real estate industry will be involved in rendering a wide variety of fundamental services to meet the growing housing demands of business and industry. Trained men and women are needed to assist in locating families, locating factories and offices, financing real estate transactions, managing commercial buildings and multiple dwellings, and appraising real property. The real estate industry offers an opportunity for personal achievement as well as the satisfaction of doing work of the highest importance in the community.

CURRICULUM BY QUARTERS

			Hrs. Per Week			
Course Title			**C**	**L**	**P**	**QH**
FIRST QUARTER						
ENG	101	Introduction to Written Communications	3	0	0	3
BUS	162	Fundamentals of Real Estate I	3	0	0	3
BUS	101	Introduction to Business	5	0	0	5
BUS	109	Business Mathematics	5	0	0	5
			16	0	0	16
SECOND QUARTER						
ENG	102	Composition	3	0	0	3
BUS	163	Fundamentals of Real Estate II	3	0	0	3
ECO	102	Economics I	3	0	0	3
BUS	120	Accounting I	4	0	3	5
			13	0	3	14
THIRD QUARTER						
ENG	100	Oral Communications	3	0	0	3
ECO	104	Economics II	3	0	0	3
BUS	121	Accounting II	4	0	3	5
CIV	105	Architectural Materials and Methods I	3	2	0	4
			13	2	3	15
FOURTH QUARTER						
BUS	239	Marketing	5	0	0	5
BUS	164	Real Estate Law	5	0	0	5
BUS	292	Appraisal I	3	0	0	3
		Elective	3	0	0	3
			16	0	0	16

Course Title			Hrs. Per Week			
			C	L	P	QH
FIFTH QUARTER						
BUS	293	Appraisal II	3	2	0	4
BUS	209	Real Estate Finance	5	0	0	5
PSY	206	Applied Psychology	3	0	0	3
BUS	216	Real Estate Sales	3	0	0	3
		Elective	3	0	0	3
			17	2	0	18
SIXTH QUARTER						
ENG	206	Business Communications	3	0	0	3
BUS	294	Appraisal III	3	2	0	4
BUS	296	Property Management	3	0	0	3
BUS	228	Real Estate Investments and Taxation	3	0	0	3
BUS	247	Business Insurance	3	0	0	3
			15	2	0	16
SEVENTH QUARTER						
BUS	236	Land Development	3	2	0	4
BUS	231	Real Estate Merchandising	3	0	0	3
BUS	238	Land Use Policy & Governmental Influences on Real Estate	3	2	0	4
BUS	235	Business Management	3	0	0	3
			12	4	0	14

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit

RESPIRATORY THERAPY TECHNOLOGY T-091

Respiratory Therapy is an allied health specialty employed in the treatment, management, control and intensive care of patients having serious respiratory problems from any cause.

After completing a Core Curriculum for Allied Health students, the student will participate in a specialized program which includes training in the therapeutic use of medical gases and oxygen administering apparatus, environmental control systems, humidification and aerosols, drugs and medications, the assistance with cardiopulmonary resuscitation, and maintenance of natural, artificial and mechanical airways.

Specific testing techniques can be employed in respiratory therapy to assist in diagnoses, monitoring, treatment and research. These include measurement of ventilatory volumes, pressure and flows, and blood-gas analysis. Respiratory physiotherapy includes teaching the patient to breathe properly. This includes means of loosening and clearing of secretions through chest percussion and postural drainage in conjunction with deep breathing.

Since respiratory therapy as a special health area parallels closely other professional areas, it is important as a member of the health care delivery system.

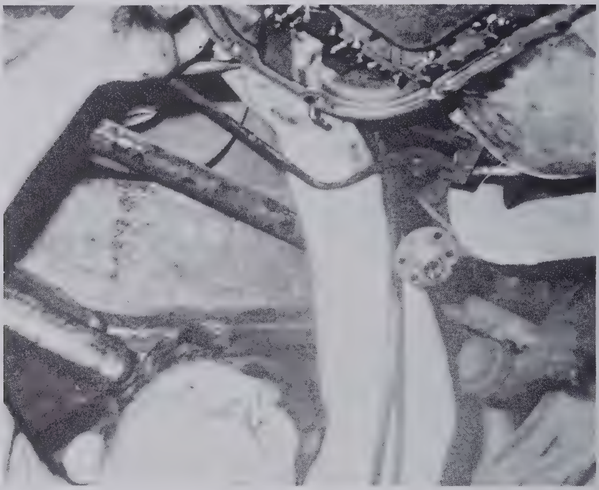
Bowman Gray School of Medicine, North Carolina Baptist Hospital and Forsyth Memorial Hospital will provide the clinical experience for degree requirements.

CURRICULUM BY QUARTERS

Suggested sequence of courses

Course Title			Hrs. Per Week C	L	P	QH
FIRST QUARTER						
BIO	107	Anatomy and Physiology I	3	2	0	4
CHM	103	Chemistry — General and Inorganic	3	2	0	4
ENG	100	Oral Communications	3	0	0	3
MAT	113	Mathematics I	3	0	0	3
BIO	115	Medical Terminology I	1	0	0	1
			13	4	0	15
SECOND QUARTER						
BIO	108	Anatomy and Physiology II	3	2	0	4
ENG	101	Introduction to Written Communication	3	0	0	3
MAT	114	Mathematics II	3	0	0	3
BIO	116	Medical Terminology II	1	0	0	1
PHY	101	Concepts in Physics	3	0	0	3
CHM	104	Organic and Biochemistry	3	2	0	4
			16	4	0	18

Course Title			Hrs. Per Week			
			C	L	P	QH
THIRD QUARTER						
PHY	102	Electricity and Electronics	3	0	0	3
HEA	116	Fundamentals of Patient Care	2	0	0	2
PSY	169	Social Psychology of Health and Illness	4	0	0	4
HEA	149	General Pharmacology	3	0	0	3
BIO	111	Microbiology	3	2	0	4
BIO	139	Cardiopulmonary Anatomy and Physiology	2	0	0	2
			17	2	0	18
FOURTH QUARTER						
INT	111	Respiratory Therapy Orientation	0	0	18	6
INT	105	Respiratory Therapy Theories and Principles	4	2	0	5
PHY	104	Fluid Mechanics	2	0	0	2
BIO	139	Topographical Anatomy	2	0	0	2
BIO	112	Pathology	3	0	0	3
			11	2	18	18
FIFTH QUARTER						
INT	205	Respiratory Therapy Theories and Principles II	2	2	0	3
INT	225	Library Research I	2	0	0	2
INT	218	Practicum I	0	0	18	6
INT	269	Pulmonary and Cardiovascular Pathophysiology and Pulmonary Mechanics	4	0	0	4
			8	2	18	15
SIXTH QUARTER						
INT	233	Chest Physiotherapy	1	2	0	2
INT	250	Intensive Respiratory Care	3	0	0	3
INT	215	Respiratory Therapy Theories and Principles III	2	2	0	3
INT	235	Library Research II	2	0	0	2
INT	228	Practicum II	0	0	18	6
INT	268	Pulmonary Function	3	0	0	3
			11	4	18	19
SEVENTH QUARTER						
INT	263	Advanced Respiratory Therapy Techniques and Theories	2	2	0	3
INT	241	Respiratory Therapy Departmental Operations	2	0	0	2
INT	287	Respiratory Therapy Pharmacology	1	0	0	1
INT	245	Library Research III	2	0	0	2
INT	211	Pediatrics	2	0	0	2
INT	238	Practicum III	0	0	18	6
INT	208	Emergency Medicine and Resuscitation	2	2	0	3
			11	4	18	19
EIGHTH QUARTER						
INT	294	Advanced Respiratory Care	2	0	0	2
INT	248	Practicum IV	0	0	36	12
BUS	235	Business Management	3	0	0	3
			5	0	36	17



PRE-TECHNICAL PROGRAM

PRE-TECHNICAL PROGRAM T-099

This program is a full-time course of study which offers preparation, remediation, and guidance for students, who, for a variety of reasons, do not meet the specific entrance requirements for the regular curriculum program of their choice. Students who do meet the minimum entrance requirements but whose previous academic records indicate that they may have difficulty in successfully completing their programs are also advised to enter the Pre-Technical Program.

The student's academic program will be individually designed to meet his specific preparatory and remedial needs. The courses will be selected from the Pre-Technical offerings, and from technical and/or vocational credit courses.

PRE-TECHNICAL COURSE OFFERINGS

COURSE	TITLE	C	L	P	QH*
BIO 010	Human Anatomy	3	0	0	0(3)
BUS 002	Introduction to Business Occupations	2	0	0	0(2)
BUS 010	Pre-Technical Accounting	5	0	0	0(5)
BUS 020	Clerical Practice	3	1	0	0(3)
BUS 030	Introduction to Shorthand	5	0	0	0(5)
CHM 010	Pre-Tech Chemistry	3	2	0	0(4)
ENG 010	Individualized English	3	2	0	0(4)
ENG 020	Basic Reading Skills and Vocabulary	3	0	0	0(3)
ENG 026	Clerical Communications	5	0	0	0(5)
HEA 001	Introduction to Health Occupations	2	0	0	0(2)
MAT 001	Structure of Arithmetic	5	0	0	0(5)
MAT 002	Pre-Business Mathematics	5	0	0	0(5)
MAT 003	Algebra	5	0	0	0(5)
MAT 004	Pre-Technical Mathematics	5	0	0	0(5)
MAT 005	Geometry	5	0	0	0(5)
MAT 020	Mathematics for Health Education	3	0	0	0(3)
MEC 001	Introduction to Engineering Technology	2	0	0	0(2)
PHY 001	Pre-Technical Physics	3	2	0	0(4)
SOC 100	Sociology I	0	4	0	2
SOC 101	Sociology II	0	4	0	2
SOC 010	Study Skills	2	0	0	0(2)

*Equivalent credit hours shown in parenthesis

DIPLOMA PROGRAMS

AIR CONDITIONING, REFRIGERATION AND HEATING V-024

During 1972, statewide licensing became mandatory for all installation and major servicing of domestic central heating and cooling systems. In cities of 10,000 population and over, a state license is now required for installers of most commercial refrigeration equipment. These and other stricter regulations are dramatic proof of the expanding activity and complexity in this field. It is reasonable to conclude, therefore, that a licensed service man is commanding higher pay and better opportunity compared to an unlicensed worker. This program, besides preparing a graduate to take the state board examinations, enables him to find immediate employment in a wide choice of jobs, which include apartment maintenance, industrial maintenance, commercial refrigeration, domestic appliances and servicing, sales engineering, self-employment, and — thanks to the growning number of cars with factory-installed air conditioners — the automotive field.

CURRICULUM BY QUARTERS

Course Title			Hrs. Per Week C	L	P	QH
FIRST QUARTER						
AHR	1102	Fundamentals of Refrigeration	7	0	9	10
WLD	1111	Air Conditioning Welding	1	0	3	2
MAT	1102	Algebra	5	0	0	5
PHY	1103	Fundamentals of Electricity	3	2	0	4
			16	2	12	21
SECOND QUARTER						
AHR	1103	Domestic and Commercial Refrigeration	6	0	12	10
ELC	1111	Applied Electricity	3	2	0	4
DFT	1107	Blueprint Reading — Air Conditioning	1	0	3	2
ENG	1101	Communications I	3	0	0	3
			13	2	15	19
THIRD QUARTER						
AHR	1104	Air Conditioning Controls I	5	0	3	6
AHR	1105	Principles of Air Conditioning	5	0	9	8
PHY	1115	Science for AHR	3	2	0	4
ENG	1112	Communications II	3	0	0	3
			16	2	12	21
FOURTH QUARTER						
AHR	1106	Air Conditioning Controls II	3	0	0	3
HET	1101	Heating Systems	6	0	15	11
PSY	1101	Human Relations	3	0	0	3
BUS	1103	Small Business Operations	3	0	0	3
			15	0	15	20

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit

AUTOMOTIVE BODY REPAIR V-001

Graduates of this program are qualified for jobs in which they remove dents in car and truck bodies and fenders; remove and replace various sheet metal parts; straighten frames, doors, hoods, and deck lids; operate four kinds of welding equipment; shrink stretched metal and prepare it for painting; paint fenders and panels, as well as a complete vehicle, with any of a number of paints and thinners. At the same time, the student is taught to interpret blueprints, charts, service manuals and wiring diagrams, and to prepare repair orders and make estimates and statements for adjustors. Much of the student's time in the shop is spent learning skills and practicing them under circumstances that closely match those met on the job. After gaining experience, many graduates open their own businesses or become body shop foremen, supervisors, or managers.

CURRICULUM BY QUARTERS

Course Title			Hrs. Per Week C	L	P	QH
FIRST QUARTER						
AUT	1111	Automotive Body Repair	3	0	12	7
MAT	1101	Fundamentals of Mathematics	5	0	0	5
ENG	1101	Communications I	3	0	0	3
WLD	1130	Applied Basic Arc and Gas Welding	1	0	6	3
			12	0	18	18
SECOND QUARTER						
AUT	1112	Automotive Body Repair	3	0	15	8
WLD	1102	Applied Metal Preparation and Welding	1	0	3	2
PHY	1101	Applied Science I	3	2	0	4
ENG	1112	Communications II	3	0	0	3
			10	2	18	17
THIRD QUARTER						
AUT	1113	Metal Finishing and Painting	2	0	12	6
PSY	1101	Human Relations	3	0	0	3
WLD	1131	Applied Inert Gas Welding	2	0	3	3
AUT	1114	Frame Straightening and Alignment	2	0	6	4
			9	0	21	16
FOURTH QUARTER						
BUS	1103	Small Business Operations	3	0	0	3
DFT	1101	Schematics and Diagrams	0	0	3	1
AUT	1115	Body Shop Applications	3	0	21	10
			6	0	24	14

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit

AUTOMOTIVE MECHANICS V-003

The Automotive Mechanics curriculum is designed to take the student without any automotive experience and teach him the many tools used for service and repairs of the automobile. He is taught, in each phase of the auto program, the construction, purpose and detail operation of each component so that he will have a better understanding of how to service and repair these components. He is also taught the operation and use of equipment that he will encounter in the service field when on the job. By using live autos and proper equipment, the student deals with the actual problems he will confront when servicing the public as a repair man.

CURRICULUM BY QUARTERS

			Hrs. Per Week			
Course Title			**C**	**L**	**P**	**QH**
FIRST QUARTER						
PME	1101	Internal Combustion Engines	4	0	15	9
PME	1103	Automobile Fuel Systems	1	0	3	2
BUS	1103	Small Business Operations	3	0	0	3
MAT	1101	Fundamentals of Mathematics	5	0	0	5
			13	0	18	19
SECOND QUARTER						
AUT	1123	Automotive Chassis and Suspension Systems	4	0	15	9
WLD	1101	Basic Gas Welding	1	0	3	2
ENG	1101	Communications I	3	0	0	3
PHY	1101	Applied Science I	3	2	0	4
			11	2	18	18
THIRD QUARTER						
PME	1102	Automotive Electrical Systems	4	0	15	9
AHR	1101	Automotive Air Conditioning	2	0	3	3
ENG	1112	Communications II	3	0	0	3
DFT	1101	Schematics and Diagrams	0	0	3	1
			9	0	21	16
FOURTH QUARTER						
AUT	1124	Automotive Power Trains	3	0	9	6
AUT	1125	Automotive Servicing	3	0	9	6
PSY	1101	Human Relations	3	0	0	3
MEC	1112	Machine Shop Processes	1	0	3	2
			10	0	21	17

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit

BUILDING TRADES DRAFTING V-015

This program prepares individuals to do drafting for the building industry. Courses are arranged in sequence to develop drafting skills and proficiency in mathematics and science. Emphasis is on gaining experience with actual problems rather than hypothetical ones. The building trades draftsman performs the general duties of a draftsman and specializes in organizing and making detail and working drawings of structures and mechanical equipment from preliminary sketches of the designer. He uses knowledge of various machines, engineering practices, building materials, and other physical sciences to complete the drawings.

CURRICULUM BY QUARTERS

			Hrs. Per Week			
Course Title			**C**	**L**	**P**	**QH**
FIRST QUARTER						
DFT	1121	Drafting I	4	0	12	8
MAT	1102	Algebra	5	0	0	5
PHY	1101	Applied Science I	3	2	0	4
DFT	1144	Building Materials and Methods	3	0	0	3
			15	2	12	20
SECOND QUARTER						
DFT	1122	Drafting II	4	0	12	8
DFT	1125	Descriptive Geometry	2	0	3	3
ENG	1101	Communications I	3	0	0	3
MAT	1103	Geometry	3	0	0	3
			12	0	15	17
THIRD QUARTER						
DFT	1141	Drafting III	4	0	15	9
DFT	1143	Building Mechanical Equipment	3	0	0	3
MAT	1104	Trigonometry	3	0	0	3
PHY	1104	Applied Science III: Light and Sound	3	2	0	4
			13	2	15	19
FOURTH QUARTER						
DFT	1142	Drafting IV	4	0	15	9
DFT	1150	Site Planning	2	0	3	3
BUS	1106	Free Enterprise System	3	0	0	3
ENG	1112	Communications II	3	0	0	3
			12	0	18	18

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit

CARPENTRY V-007

Carpentry is one of the basic trades in the construction industry. Using hand and power tools, carpenters construct, erect, install and repair structures of wood, plywood, wallboard, and other materials. Students are taught to read blueprints of actual house plans, to work on foundations and footings, and to do interior framing, exterior trim, and roofing. Examples of specialization are layout carpenter, framing carpenter, concrete form carpenter, scaffolding carpenter, acoustical and insulating carpenter, and finish carpenter. The carpentry curriculum provides the student a background with which to enter the trade as an apprentice. For every hour in the classroom, the student spends about three hours developing shop skills and working on off campus projects.

CURRICULUM BY QUARTERS

			Hrs. Per Week			
Course Title			**C**	**L**	**P**	**QH**
FIRST QUARTER						
CAR	1101	Framing, Sheathing, and Insulation I	2	0	18	8
MAT	1113	Carpenter's Mathematics and Estimating	5	0	0	5
DFT	1110	Blueprint Reading I	0	0	3	1
ENG	1101	Communications I	3	0	0	3
			10	0	21	17
SECOND QUARTER						
CAR	1102	Framing, Sheathing, and Insulation II	3	0	18	9
MAT	1114	Carpenter's Mathematics and Estimating	3	0	0	3
DFT	1111	Blueprint Reading II	0	0	3	1
PSY	1101	Human Relations	3	0	0	3
			9	0	21	16
THIRD QUARTER						
CAR	1103	Interior and Exterior Trim	3	0	21	10
CAR	1114	Building Codes	3	0	0	3
BUS	1103	Small Business Operations	3	0	0	3
			9	0	21	16
FOURTH QUARTER						
CAR	1105	Finish Work	6	0	21	13
ENG	1112	Communications II	3	0	0	3
			9	0	21	16

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit

DIESEL TRUCK MAINTENANCE AND REPAIR V-013

The diesel mechanics keep bulldozers, tractors, trucks and other diesel-powered equipment in top runing order for farms and industry. Most diesel mechanics specialize in one of these kinds of diesel equipment.

The program at Forsyth Technical Institute trains students to enter the maintenance division of the trucking industry, and the scope and nature of shop work offered match closely that of the trucking industry itself. The repair and maintenance of late-model trucks and component parts obtained from industry assure the student of learning his craft on equipment similar to what he will encounter upon graduation, and his working with hand tools and reconditioning and testing equipment currently used in the trucking industry further eases his transition from instruction to industry.

CURRICULUM BY QUARTERS

Course Title	Hrs. Per Week C	L	P	QH
FIRST QUARTER				
DSL 1101 Diesel Engines	4	0	15	9
WLD 1101 Basic Gas Welding	1	0	3	2
PHY 1101 Applied Science I	3	2	0	4
ENG 1101 Communications I	3	0	0	3
	11	2	18	18
SECOND QUARTER				
DSL 1102 Diesel Electrical and Fuel Systems	4	0	15	9
AHR 1101 Automotive Air Conditioning	2	0	3	3
MAT 1101 Fundamentals of Mathematics	5	0	0	5
DFT 1101 Schematics and Diagrams	0	0	3	1
	11	0	21	18
THIRD QUARTER				
DSL 1103 Diesel Fuel Injection	2	0	6	4
DSL 1104 Power Trains, Chassis & Suspension Systems	4	0	15	9
ENG 1112 Communications II	3	0	0	3
	9	0	21	16
FOURTH QUARTER				
DSL 1105 Diesel Servicing	5	0	15	10
MEC 1120 Machine Processes	1	0	6	3
BUS 1106 Free Enterprise System	3	0	0	3
	9	0	21	16

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit

ELECTRICAL INSTALLATION V-018

The rapid development and increased use of new products, together with the expanding economy, are demanding more and better qualified workers to install and maintain electrical equipment. This program provides the basic knowledge and practices needed to enter an electrical trade as an on-the-job trainee; and the more than 500 hours a student spends on actual work sites before graduation reduces significantly his apprenticeship training afterwards. Through classroom, shop, and laboratory instruction and experience, a student learns the basics of motor and motor control systems, industrial electronic control systems, business procedures, and communications skills; and he will understand the National Electrical Code as it relates to wiring, electrical circuits, and the measurements of voltage, current, power, and power factor of single and polyphase alternating circuits. Persons entering this program should have a strong mathematics background, including at least one year of algebra.

CURRICULUM BY QUARTERS

			Hrs. Per Week			
Course Title			**C**	**L**	**P**	**QH**
FIRST QUARTER						
ELC	1112	Direct and Alternating Current	5	0	12	9
ENG	1101	Communications I	3	0	0	3
MAT	1116	Electrical Mathematics	5	0	0	5
PHY	1101	Applied Science I	3	2	0	4
			16	2	12	21
SECOND QUARTER						
ELC	1113	Alternating Current and Direct Current Machines and Controls	5	0	15	10
DFT	1110	Blueprint Reading: Building Trades	0	0	3	1
ENG	1112	Communications II	3	0	0	3
PHY	1102	Applied Science II	3	2	0	4
			11	2	18	18
THIRD QUARTER						
ELC	1124	Residential Wiring	6	0	12	10
ELN	1118	Industrial Electronics	3	0	3	4
PSY	1101	Human Relations	3	0	0	3
DFT	1113	Blueprint Reading: Electrical	0	0	3	1
			12	0	18	18
FOURTH QUARTER						
ELC	1125	Commercial and Industrial Wiring	6	0	15	11
ELN	1119	Industrial Electronics	3	0	3	4
BUS	1103	Small Business Operations	3	0	0	3
			12	0	18	18

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit

ELECTRONIC SERVICING V-042

Lest anyone overlook the importance of television servicing, let him answer only two questions: How many people have and use television receivers? and How many people who have and use television receivers can repair one when it needs repairing? In the difference between these two numbers lies the opportunity in entering television servicing. The television repair program includes instruction in the basic knowledge and skills required to install, maintain and service television receivers. Laboratory work in circuitry, schematic diagrams and troubleshooting supplements classroom instruction and demonstration. During the final quarter, intensive work in servicing color television sets reflects their growing popularity. This is an approved C. E. T. course.

CURRICULUM BY QUARTERS

Course Title			Hrs. Per Week C	L	P	QH
FIRST QUARTER						
ELC	1120	Direct and Alternating Current	8	8	6	14
MAT	1115	Elements of Mathematics	5	0	0	5
ENG	1101	Communications I	3	0	0	3
			16	8	6	22
SECOND QUARTER						
ELN	1121	Vacuum Tubes and Circuits	4	4	3	7
ELN	1122	Transistor Theory and Circuits	6	4	6	10
ENG	1112	Communications II	3	0	0	3
			13	8	9	20
THIRD QUARTER						
ELN	1123	Black and White Television Servicing	10	6	9	16
PHY	1104	Applied Science: Light and Sound	3	2	0	4
			13	8	9	20
FOURTH QUARTER						
ELN	1124	Color Television Servicing	10	8	9	17
BUS	1103	Small Business Operations	3	0	0	3
			13	8	9	20

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit

GRAPHIC ARTS V-022

Printing is the second largest industry in the United States in terms of the number of existing establishments.

Printing is carried on everywhere; all over the world. Wherever there is civilization, there is printing. The printer can be employed on a weekly newspaper in a small town, or he can work in one of the huge plants in larger cities.

Working conditions are, as a rule, good. Work, especially on the newspapers, is steady and there are no seasonal layoffs as there are in some other industries.

This curriculum is designed to give students experience in a cluster of activities representing basic areas of the graphic arts industry. The range of experiences is sufficient to enable students to understand a variety of graphic arts processes and to develop skills enabling them to perform these processes with a high degree of efficiency. The print shop is large and well lighted, and the equipment is the most modern which can be obtained.

CURRICULUM BY QUARTERS

	Hrs. Per Week			
Course Title	**C**	**L**	**P**	**QH**
FIRST QUARTER				
PRN 1112 Printing Orientation	2	0	6	4
PRN 1130 Layout and Design	2	0	3	3
PRN 1128 Copy Preparation I	2	0	3	3
MAT 1150 Printer's Mathematics	5	0	0	5
PRN 1101 Printer's English	3	0	0	3
BUS 1122 Typing I	2	0	3	3
	16	0	15	21
SECOND QUARTER				
PRN 1126 Offset Presswork I	2	0	6	4
PRN 1125 Offset Camera I	3	0	6	5
PRN 1124 Offset Stripping and Platemaking	2	0	6	4
PHY 1114 Science for Printers	3	2	0	4
	10	2	18	17
THIRD QUARTER				
PRN 1129 Copy Preparation II	3	0	6	5
PRN 1113 Offset Camera II	3	0	6	5
PRN 1127 Offset Presswork II	3	0	6	5
ENG 1101 Communications I	3	0	0	3
	12	0	18	18
FOURTH QUARTER				
PRN 1140 Elective	0	0	21	7
PRN 1114 Estimating I	5	0	0	5
BUS 1103 Small Business Operations	3	0	0	3
ENG 1112 Communications II	3	0	0	3
	11	0	21	18

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit

MACHINIST V-032

If there is any one worker indispensible to manufacturing, it is probably the machinist; for it is he who forms into steel the idea on the engineer's blueprint. The grinding, milling, and lathing of these complex parts require rare skill, and most employers want to hire only the well trained. This reduces on-the-job training time, results in higher starting salaries, and makes for faster advancement and job success. The machinist program is both broad and detailed — broad enough to permit the graduate to fill number of jobs in a company's machine shop, detailed enough to ensure that he understands the work fully. The demand for machinists is much greater than the supply. For the person who likes to work with his hands, where precision rules, who delights in fashioning from formless metal an engine piston, a missile part, or perhaps a surgical tool, the machinist field offers satisfaction and challenge.

CURRICULUM BY QUARTERS

			Hrs. Per Week			
Course Title			C	L	P	QH
FIRST QUARTER						
MEC	1101	Machine Shop Theory and Practice I	3	0	12	7
MAT	1101	Fundamentals of Mathematics	5	0	0	5
DFT	1104	Blueprint Reading: Mechanical I	0	0	3	1
WLD	1101	Basic Gas Welding	1	0	3	2
BUS	1106	Free Enterprise System	3	0	0	3
			12	0	18	18
SECOND QUARTER						
MEC	1102	Machine Shop Theory and Practice II	3	0	12	7
MAT	1102	Algebra	5	0	0	5
PHY	1101	Applied Science I	3	2	0	4
DFT	1105	Blueprint Reading: Mechanical II	0	0	3	1
MEC	1115	Treatment of Ferrous Metals	2	0	3	3
			13	2	18	20
THIRD QUARTER						
MEC	1103	Machine Shop Theory and Practice III	4	0	12	8
DFT	1106	Blueprint Reading: Mechanical III	0	0	3	1
MAT	1103	Geometry	3	0	0	3
ENG	1101	Communications I	3	0	0	3
MEC	1116	Treatment of Non-Ferrous Metals	2	0	3	3
			12	0	18	18
FOURTH QUARTER						
MEC	1104	Machine Shop Theory and Practice IV	4	0	15	9
MAT	1104	Trigonometry	3	0	0	3
PHY	1102	Applied Science II	3	2	0	4
ENG	1112	Communications II	3	0	0	3
			13	2	15	19

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit

MECHANICAL DRAFTING V-017

The first two quarters of the Mechanical Drafting program contain courses basic to all fields of drafting. The third and fourth quarters contain specialization and related courses that prepare one to enter mechanical drafting occupations.

Each course is prepared to enable an individual to advance rapidly in drafting proficiency upon entering the field of work. Courses are arranged in sequence to develop drafting skills and proficiency in mathematics and science. The draftsman associates with many levels of personnel — administrators, architects, engineers, skilled workmen — and must be able to communicate effectively with them. Courses to develop knowledge and skills in communication, human relations, economics, and industrial organization are provided to assist the student in developing understanding and confidence in his relations with other persons.

CURRICULUM BY QUARTERS

			Hrs. Per Week			
Course Title			**C**	**L**	**P**	**QH**
FIRST QUARTER						
DFT	1121	Drafting I	4	0	12	8
MAT	1102	Algebra	5	0	0	5
ENG	1101	Communications I	3	0	0	3
PHY	1101	Applied Science I	3	2	0	4
			15	2	12	20
SECOND QUARTER						
DFT	1122	Drafting II	4	0	12	8
MAT	1103	Geometry	3	0	0	3
DFT	1125	Descriptive Geometry	2	0	3	3
PHY	1102	Applied Science II	3	2	0	4
			12	2	15	18
THIRD QUARTER						
DFT	1131	Mechanical Drafting	2	0	12	6
MAT	1104	Trigonometry	3	0	0	3
MEC	1115	Treatment of Ferrous Metals	2	0	3	3
MEC	1113	Shop Processes	2	0	3	3
ENG	1112	Communications II	3	0	0	3
			12	0	18	18
FOURTH QUARTER						
DFT	1132	Mechanical Drafting	2	0	12	6
MEC	1116	Treatment of Non-Ferrous Metals	2	0	3	3
MEC	1114	Shop Processes	2	0	3	3
BUS	1105	Industrial Organizations	3	0	0	3
PSY	1101	Human Relations	3	0	0	3
			12	0	18	18

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit

PLUMBING AND HEATING V-037

One has only to look about him to observe the startling number of new structures going up, commercial, industrial, and domestic. Every such building has pipe systems, which carry water, steam, air, or other liquids and gases needed for sanitation, heating and industrial production; and each pipe system requires plumbers and pipefitters, not only to install it but to keep it operating. This program trains the individual to enter this field with the theoretical knowledge he needs to understand new systems, as well as old, and the practical experience that enables him to become a journeyman in minimum time.

CURRICULUM BY QUARTERS

Course Title			**Hrs. Per Week**			
			C	**L**	**P**	**QH**
FIRST QUARTER						
PLU	1116	Plumbing Pipework and Domestic Water Systems	5	0	15	10
DFT	1110	Blueprint Reading I	0	0	3	1
MAT	1117	Plumber's Arithmetic	4	0	0	4
PSY	1101	Human Relations	3	0	0	3
			12	0	18	18
SECOND QUARTER						
WLD	1101	Basic Gas Welding	1	0	3	2
PLU	1125	Industrial Piping	2	0	6	4
PLU	1126	Hydraulic Systems Plumbing	2	0	3	3
PLU	1130	Plumbing Layouts and Codes	4	0	6	6
ENG	1101	Communications I	3	0	0	3
			12	0	18	18
THIRD QUARTER						
US	1103	Small Business Operations	3	0	0	3
LU	1123	Hot Water and Panel Heating	3	0	7	5
LU	1122	Low and High Pressure Steam Systems	5	0	12	9
			11	0	19	17
FOURTH QUARTER						
LU	1112	Plumbing Fixtures and Installations	2	0	3	3
FT	1112	Drafting I: Plumbing	1	0	3	2
LU	1120	Plumbing Maintenance and Trouble Shooting	3	0	18	9
			6	0	24	14

Class
Lab
Practicum
H-Quarter Hours Credit

PRACTICAL NURSE EDUCATION V-038

The Practical Nursing student receives one year (four quarters) of classroom instruction and nursing practice through the Practical Nurse Education Programs, sponsored by the Department of Community Colleges, State Board of Education, and accredited yearly by the North Carolina Board of Nursing.

Following one quarter of classroom instruction in fundamentals of nursing and principles from the biological and social sciences, the student has the opportunity to practice nursing skills under faculty supervision in the hospital area. In advanced quarters, she studies the nursing care of patients of all ages through carefully planned assignments correlated with classroom instruction in medical-surgical nursing, care of the sick child, and care of the mother and newborn infant.

A satisfactory grade on the North Carolina Board of Nursing Examination is necessary for employment in North Carolina health agencies as a Licensed Practical Nurse.

CURRICULUM BY QUARTERS

			Hrs. Per Week			
Course Title			**C**	**L**	**P**	**QH**
FIRST QUARTER						
PNE	1101	Fundamentals of Practical Nursing	9	2	3	11
PNE	1102	Nutrition and Diet Therapy	3	0	0	3
PNE	1103	Anatomy and Physiology	3	0	0	3
PSY	1101	Human Relations	3	0	0	3
			18	2	3	20
SECOND QUARTER						
PNE	1106	Medical-Surgical Nursing I	5	0	0	5
PNE	1107	Maternity Nursing	3	0	0	3
PNE	1109	Clinical Experience	0	0	21	7
PNE	1105	Introduction to Drug Administration	3	0	0	3
			11	0	21	18
THIRD QUARTER						
PNE	1110	Medical-Surgical Nursing II	5	0	0	5
PNE	1112	Clinical Experience	0	0	21	7
ENG	1101	Communications I	3	0	0	3
PNE	1108	Nursing of Children	3	0	0	3
PNE	1111	Drug Therapy	3	0	0	3
			14	0	21	21
FOURTH QUARTER						
PNE	1113	Medical-Surgical Nursing III	5	0	0	5
PNE	1114	Clinical Experience	0	0	24	8
PNE	1115	Personal and Vocational Relationships	2	0	0	2
ENG	1112	Communications II	3	0	0	3
			10	0	24	18

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit

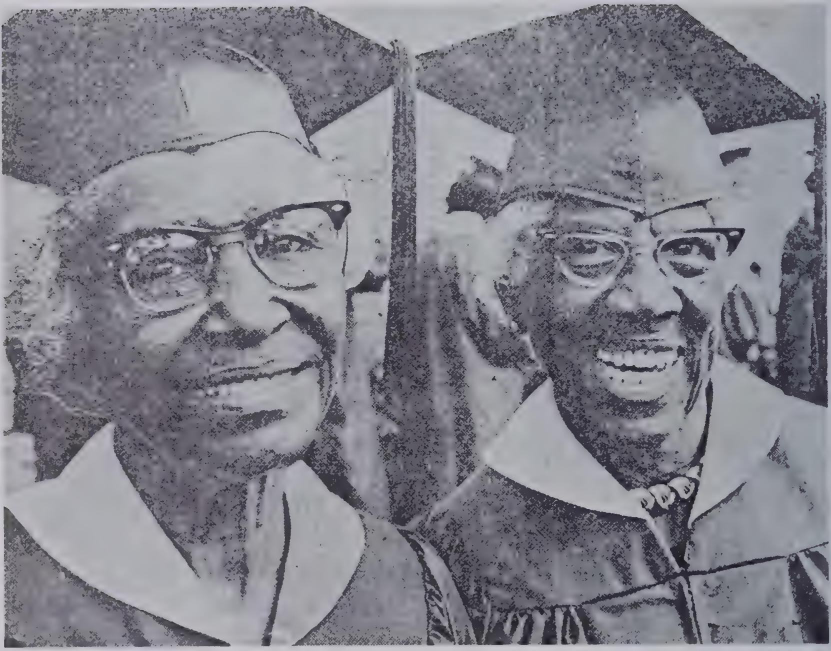
WELDING AND METAL FABRICATION V-050

The Welding and Metal Fabrication program offered at Forsyth Technical Institute provides the student with the necessary experience in the welding and metal fabrication processes, and also broadens his technical education in such fields as blueprint reading, shop mathematics, metallurgy, and physical science. The principles of fabrication and fabrication equipment are taught in the shop each quarter along with the welding processes. Upon successful completion of the curriculum courses the student is given the standard American Welding Society (A.W.S.) Welder Qualification Test.

CURRICULUM BY QUARTERS

Course Title			**Hrs. Per Week** C	L	P	QH
FIRST QUARTER						
MAT	1101	Fundamentals of Mathematics	5	0	0	5
PSY	1101	Human Relations	3	0	0	3
DFT	1104	Blueprint Reading: Mechanical I	0	0	3	1
WLD	1120	Oxyacetylene Welding and Cutting	4	0	15	9
			12	0	18	18
SECOND QUARTER						
ENG	1101	Communications I	3	0	0	3
PHY	1101	Applied Science I	3	2	0	4
WLD	1121	Basic Arc Welding	4	0	15	9
DFT	1105	Blueprint Interpretation	0	0	3	1
			10	2	18	17
THIRD QUARTER						
ENG	1112	Communications II	3	0	0	3
MEC	1115	Treatment of Ferrous Metals	2	0	3	3
WLD	1124	Advanced Arc Welding	3	0	12	7
WLD	1123	Inert Gas Welding	1	0	6	3
			9	0	21	16
FOURTH QUARTER						
BUS	1106	Free Enterprise System	3	0	0	3
MEC	1112	Machine Shop Processes	1	0	3	2
WLD	1113	Mechanical Testing and Inspection	1	0	3	2
WLD	1126	Advanced Inert Gas Welding	3	0	9	6
WLD	1127	Introduction to Pipe Welding	1	0	6	3
			9	0	21	16

C-Class
L-Lab
P-Practicum
QH-Quarter Hours Credit



ADULT EDUCATION

ADULT EDUCATION PROGRAM

The Adult Education Program offers a variety of courses that serve the many educational needs of our local community. These courses vary in purpose and may be designed specifically for the particular needs of the general public or of local industry. Presently the courses which make up the program fall within the following general classifications: Occupational Extension, Management Development Training, New Industry Training, Vocational Curriculum, Adult High School Diploma, Enrichment, Manpower Development Training Act Courses, and Adult Basic Education. New programs and/or courses are periodically developed when needs become apparent.

Those individuals who wish to work toward a high school diploma or toward a diploma in one of the vocational areas should plan their sequence of courses with the evening counselor.

Anyone seeking additional information or wishing to develop a new program should contact the Director of Adult Education at the Institute.

OCCUPATIONAL EXTENTION PROGRAM

Courses in this program are occupationally oriented, providing adults with the opportunity to upgrade skills and knowledge in certain vocational and technical areas. This program is the largest administered by the Adult Education Department and includes upgrading training in such areas as drafting, health occupations, firemanship training, and welding. It also gives the regular curriculum graduates of the Institute an opportunity to participate in a continuing educational program after entering the world of work.

The following is a brief list of courses which have been offered in the past, and may be offered in the future:

Air Conditioning Design
Advanced Algebra
Automotive Tune-Up
Basic Arc Welding
Basic Computer Logic
Blueprints and Measurements
Central Air Conditioning Systems
Communication in Nursing
Electrical Apprenticeship
Electrical Installation and Repair
Electrical Systems (Diesel Trucks)
Estimating for Printers
FCC Radiotelephone Operator's License (Prep. I & II)
Offset Printing
Industrial Electronics
Plumbing Apprenticeship
Reading Improvement
Recruit Training for Police Officers
Small Engine Repair
General Machine Shop Practices
House Plan Drawing and Planning
Introduction to Cabinet Making
Introduction to Fire Protection Hazards
Introduction to Occupational Safety and Health Act of 1970

- Fundamentals of Solid State Color Television Circuitry
- Hydraulics & Pneumatics
- Industrial Ventilation
- Math Review, Analytic Geometry, and Calculus
- Mechanical Drawing
- Numerical Control Milling Machine Applications
- Nursing Mathematics
- Nutrition
- Machine Shop Processes
- Machinist Apprenticeship
- Technical Illustrating
- Technical Mathematics
- Technical Report Writing
- Tolerancing and Dimensioning for Engineering Drawing
- Truck Suspension and Wheel Alignment
- Written Communications
- Tool Making

COST: $2.00 registration fee per course.

TIME: Generally, classes are conducted one or two evenings per week (Monday through Thursday and Saturday mornings) for a period of eleven (11) weeks.

NOTE: The Adult Education Director should be contacted if additional information about this program is required.

MANAGEMENT DEVELOPMENT TRAINING

Management Development Training is an educational progra designed to upgrade the competency of supervisory and mid management personnel in business and industry. Classes ar scheduled in accordance with the needs of industry.

Supervisors or potential supervisors may qualify for an MD Diploma by completing 16 courses. For supervisors pursuing th MDT Diploma, it is suggested that this program be planned to cover two-year period. Most of the courses are taught during evening hour and on Saturday morning.

Applicants for this program should presently be supervisor o have ambitions to become a supervisor. There are no prerequisite for entry into the program.

The cost of the program is $2.00 per course. There are four re quired courses and most courses meet one night per week for eleve (11) weeks.*

The Management Development Training Program includes suc courses as:

Art of Motivating & Handling People
Economics
Human Relations
Principles of Management
Applied Psychology
Job Analysis & Wage Salary Administration
Quality Control
Time & Motion Study
Business Letter Writing
Public Speaking
Business Math
Techniques of Clear Writing
Management by Objectives
Principles of Management
Personnel Management-Industrial Relations
Planning & Controlling
Staffing & Communicating
Managing Time
Conference Leadership Training
Problem Solving & Decision Making
Managing Absenteeism and Turnover
Abusive Use of Drugs
OSHA Law Introduction & Industrial Safety
First Aid Standard
Organizing and Implementin a Safety Program
Principles of Supervision
Labor Law
Handling Barriers in Communications
Extemporaneous Speaking
Guidance & Counseling
Instructor Training
Slide Rule I
Internal Communications

The Evening Counselor should be contacted for further information.

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*Certain ones of these courses are also offered on Saturday morning

NEW INDUSTRY TRAINING

One of the basic objectives of Forsyth Technical Institute is to participate in the creation of more challenging and rewarding jobs for the citizens of our community by providing a customized training service to new and expanding industries. Subject to minimal limitations, this institution, in cooperation with the Industrial Services Division of the Department of Community Colleges, will design and administer a special program for training the production manpower required by any new or expanding industry creating new job opportunities. The purpose of this program is to assist new or expanding industry to meet its immediate manpower needs and to develop a long-range training program of its own to satisfy its continuing replacement and retraining needs.

This program includes the following services:

1. Consultation in determining job descriptions; defining areas of training; and prescribing appropriate course outlines, training schedules and materials.
2. Selection and training of instructors and providing instructional services for the duration of the training program.
3. Providing of suitable space for a temporary training facility prior to the completion of the new plant including the installation costs of equipment in the temporary training facility.

The Director of Adult Education should be contacted if additional information about this program is required.

ADULT HIGH SCHOOL DIPLOMA PROGRAM

Forsyth Technical Institute, in cooperation with the Winston-Salem/Forsyth County School System, is now offering evening courses for high school credit to adult students who wish to obtain an adult high school diploma.

Classes in each course meet two nights per week from 6:15 to 9:15 for eleven (11) weeks. Students may carry two courses per quarter and need a total of 17 courses to complete the program. No student will receive credit for a course if his cumulative absences and/or tardies total more than six hours. Late enrollment does represent absences.

Persons to be enrolled must be 18 years of age or older, and the class with which they entered high school must have graduated. Each enrollee must have completed the eighth grade, or a higher grade, in an accredited school, or he must have completed the eighth grade level in the Adult Basic Education Program conducted by the Department of Community Colleges. Each enrollee must be in an acceptable condition of physical and mental health.

Information regarding eligibility, courses needed for graduation, and registration for classes should be obtained from the evening counselor at Forsyth Technical Institute. The counselor is available for personal consultation in the Student Personnel Office Monda through Thursday from 1:00 p.m. until 10:00 p.m. and on Friday fro 8:00 a.m. until 5 p.m.

There is a $2.00 registration fee for each course and students mus furnish their own books and supplies.

Transcripts of work done will be furnished by the evenin counselor on written request of the student.

The following is a list of high school courses by quarter:

FALL QUARTER
(Monday & Wednesday)
Essentials of English
Current Literature
World Literature
Office Machines
(Tuesday & Thursday)
Biology
General Math
Sociology
Bookkeeping

WINTER QUARTER
(Monday & Wednesday)
Essentials of English
American Literature
English Literature
Record Keeping
(Tuesday & Thursday)
Algebra
General Science
Typewriting
U. S. History

SPRING QUARTER
(Monday & Wednesday)
Essentials of English
Current Literature
Humanities
Office Machines
(Tuesday & Thursday)
American Government
Biology
Consumer Math
Bookkeeping

SUMMER QUARTER
(Monday & Wednesday)
Essentials of English
American Literature
English Literature
Record Keeping
(Tuesday & Thursday)
Business Math
General Science
Typewriting
U. S. History

FILLER COURSES

Filler courses listed below may be offered when 15 student notify the Evening Counselor at least three weeks before the quarte begins.

Black History
Black Writers
Chemistry
English Language Arts
Health
Psychology
Public Speaking
Record Keeping
World Geography
World History

The evening counselor should be contacted for additional information about this program.

ENRICHMENT PROGRAM

The Enrichment Program offers a variety of one quarter terminal courses designed for self-interest and self-development.

Some of the courses offered in the past are:

Bread Baking, Gourmet
Cake Decorating
Ceramics
Chair Caning
Crocheting
Decorative Art
Decoupage
Flower Arranging
Freehand Drawing
Furniture Finishing & Refinishing
Income Tax, Basic
Interior Decorating
Knitting
Leather Crafts
Local History & Genealogy
Millinery
Needle Art
Painting, Acrylic
Painting, Oil
Portraits, Basic
Quilt Making
Real Estate, Basic
Real Estate, State Exam Prep.
Sewing, Basic
Sewing, Advanced Women's Fashions
Sewing, Drapery Making
Sewing, Men's Fashion Knits
Sewing, Pattern Drafting, Basic
Sewing, Stretch Fabric & Lingerie
Sign Language
Stock Market
Tailoring
Upholstering Furniture
Wallpaper Hanging
Weaving & Macrame
Wills, Trusts & Probate

Cost: $2.00 registration fee plus supplies.

Time: Classes are conducted one evening per week (Monday through Thursday) and on Saturday morning for a period of eleven (11) weeks.

ADULT BASIC EDUCATION PROGRAM

The purpose of the Adult Basic Education Program is to provide education for illiterate and undereducated adults. The specific function of the program is to educate those over eighteen years of age whose inability to speak, read, or write the English language constitutes a substantial impairment of their ability to obtain or retain employment commensurate with their real ability — with a view: "to making them less likely to become dependent on others; to improving their ability to benefit from occupational training and otherwise increasing their opportunities for more productive and profitable employment, and to make them better able to meet their adult responsibilities." Specifically the A.B.E. program is designed to allow adults to attain an eighth grade educational level.

Enrollment procedures for the Adult Basic Education Program include: (1) registration, (2) testing for placement, and (3) counseling. No transcripts or formal academic credentials are required for admission.

The majority of A.B.E. classes are held in public school buildings through a cooperative agreement with the Winston-Salem/Forsyth County School System. Classes usually meet two nights per week, three hours per night. No fees are charged to the student and all books and materials are supplied free of charge.

MANPOWER TRAINING PROGRAM

MTP courses are designed to alleviate conditions of unemployment and underemployment. These courses are directed toward the disadvantaged and provide an opportunity for these persons to gain a vocation and acquire a marketable skill. All students in these courses are recruited and selected by the N. C. Employment Security Commission.

Following is a brief list of MTP courses which have been offered in the past:

Food Service Worker
Carpentry
Welding
Woodworking
House Painting
Child Care Worker
Upholstering
General Office Clerk
Unit Ward Clerk
Medical Records Clerk
Patient Care Technician

COURSES OF INSTRUCTION

AGRICULTURE

AGR 140 Home Maintenance 2 4 0 4

A course dealing with the various jobs associated with maintaining a lawn and home surroundings throughout the year. Included would be shrub fertilization, tree fertilization, disease control of lawns and shrubs, pruning, proper irrigation of shrubs and lawns, and proper use of various herbicides and pesticides. It will be aimed at the person interested in making maintenance their choice of career work. Prerequisite: None.

AGR 145 Entomology and Pathology 3 4 0 5

A study of insects that attack ornamental plant materials. The nature, structure, and importance of each insect studied in detail. Additional emphasis placed upon detection, identification, and control of the insects studied. A study of the control of disease of ornamental crops through the study of structure, life history, and identification of the various parasitic disorders which plague ornamental trees, shrubs, flowers, and turf. Prerequisite: None.

AGR 151 Plant Materials I 3 4 0 5

Introduction to the study of woody plant materials which gives an overview of the woody plants grown in nurseries for landscape purposes and those found in woodlands and fields of North Carolina. Emphasizes deciduous shrubs and small trees. Prerequisite: None.

AGR 152 Plant Materials II 3 4 0 5

A continuation of AGR 151 in which additional trees and shrubs are studied. Major emphasis placed upon the detailed study of broad leaved and narrow leaved evergreens. Prerequisite: AGR 151.

AGR 153 Greenhouse Management 3 2 0 4

Fundamentals and practices in greenhouse plant production. Construction and management of plastic and glass greenhouses, including the control of heat, light, ventilation, and humidity. Crop studies include both cut flower and pot plant crops. Prerequisite: None.

AGR 170 Plant Science 4 2 0 5

An introductory general botany course covering the fundamental principles of the reproduction, growth, functions, and development of seed bearing plants. Prerequisite: None.

AGR 185 Soil Science and Fertilizer 5 2 0 6

A course dealing with basic principles of efficient classification, evaluation, and management of soils; care, cultivation, and fertilization of the soil, conservation of soil fertility. Prerequisite: None.

AGR 200 Practicum 0 0 30 3

A course to permit students to become oriented to the physical aspects of jobs available in their chosen field and to provide opportunities for the development of personal relationships of the type needed by students in any job. To enable students to acquire the skills and practical knowledge necessary for success in their chosen career fields. Prerequisite: Must be second year Horticulture students pursuing degree.

AGR 201 Agricultural Chemicals 4 2 0 5

A study of agricultural chemicals — their importance, ingredients, formulation, and application with emphasis on the effective and safe utilization of chemicals in agricultural pest control. Major emphasis placed upon weed identification and those chemicals utilized for weed control. Part of the course devoted to those chemicals other than herbicides — such as insecticides, fungicides, and others. Prerequisite: CHM 101.

AGR 210 Field Analysis 5 0 0 5

Students will keep records of the experience received in Practicum AGR 200. They will relate such experience to the following major areas of instruction. Plant materials, Plant Science, Soil Science and Fertilizer, Agricultural Chemicals, Landscape Construction, Landscape Gardening, Plant Propagation, and Nursery Management. Records will be summarized in the form of a weekly report and reviewed by the instructor. These reports will culminate in a final term paper.

AGR 220 Vegetable and Flower Gardening 4 0 0 4

For the student to be able to plan effectively a complete vegetable garden that will encompass the entire year. The student will also learn how to properly grown them by use of insecticides, herbicides, and proper fertilization. If possible the students will have a garden to take care of so that they might carry out their classroom work.

AGR 240 Landscape Construction 4 2 0 5

A study dealing with the actual construction of brick patios, walks, steps, brick borders, brick walls around trees, lawn furniture, pinic tables, or other wood projects which may be used in a home landscape. It will also cover estimating the job cost of these various projects, including drawing all plans to scale. Prerequisite: None.

AGR 251 Landscape Gardening I 3 4 0 5

An introduction and study of the basic principles of landscape design. Considerable emphasis placed on the problems associated with residential site development. Includes a section devoted to blueprint reading. Considerable laboratory time devoted to visiting established residential sites. The course is not oriented toward a mastery of creativity and artistry, but toward an understanding of certain principles fundamental to all landscape design endeavors. Prerequisites: AGR 151 & AGR 152.

AGR 252 Landscape Gardening II 3 4 0 5

Development and maintenance of landscape areas including planting, pruning, fertilization, and pest control. Fundamentals of landscape economics: cost, contracts, calculating areas, volumes, and plant quantities for landscape projects. Selection and use of materials in landscape construction. Prerequisite: AGR 151, AGR 152, AGR 251.

AGR 254 Plant Propagation 3 2 0 4

A study of basic concepts and principles of sexual and asexual propagation. Techniques studied through practical exercises conducted in laboratory sessions. Emphasis given to those propagation methods widely utilized in the industry. Prerequisite: None.

AGR 256 Nursery Management I 2 4 0 4

An introductory study of nursery operations to acquaint the student with the diversity of nursery plant production, equipment, and operation detail through the study of such areas as pruning, fertilization, plant protection, and others. Additional emphasis placed on the theory and practices necessary to produce profitable nursery stock. Prerequisite: None.

AGR 257 Nursery Management II 2 4 0 4

A continuation of AGR 256 with increased emphasis placed upon production schedules, choice and quantities of stock to be grown, as well as developing cost finding, price establishing, and record keeping for economically important nursery crops. Planning of nursery layout and facilities. Prerequisite: AGR 256.

AGR 258 Turf Practices 3 4 0 5

A study of special-purpose turf grasses including identification, use, establishment, and maintenance of the specific grasses. Laboratory time used for field trips to golf courses where each student observes and participates in those operations required to maintain a healthy, vigorous playing surface. Prerequisite: AGR 185.

AGR 259 Garden Center Management 1 2 0 2

A course covering all phases of garden center operations including some of the major problems. Areas of study include such factors as: layout, stocking, product knowledge, traffic flow, seasonal fluctuation, risks, diversification, and merchandising. Ample time devoted to visiting established garden center operations. Prerequisite: None.

AIR CONDITIONING

AHR 106 Architectural Mechanical Equipment *3 0 3 4*

General study of heating, air conditioning, plumbing and electrical equipment, materials and symbols. Building code requirements pertaining to residential and commercial structures. Reading and interpretation of working drawings by mechanical engineers. Coordination of mechanical and electrical features with structural and architectural designs. Prerequisite: None.

AHR 1101 Automotive Air Conditioning *2 0 3 3*

General introduction to the principles of refrigeration; study of the assembly of the components and connections necessary in the mechanisms, the methods of the operation, and control; proper handling of refrigerants in charging the system. Prerequisite: None.

AHR 1102 Fundamentals of Refrigeration *7 0 9 10*

Identification, selection and use of hand, measuring and special refrigeration tools; power drills, grinders and pipe threaders; copper tubing, fittings and tubing fabrication. Physics related to refrigeration. The basic refrigeration cycle. Classification, characteristics and properties of refrigerants. Types, purpose and principle of operation of compressors, condensers, receivers and evaporators. Assembly and operation of a basic refrigeration system. Leak checking, evacuating and charging. Compressor operational checks. System trouble analysis. Prerequisite: None.

AHR 1103 Domestic and Commercial Refrigeration *6 0 12 10*

Types and operating principles of domestic hermetic units. Also domestic absorbtion units. Operation and trouble analysis of hermetic electrical components and circuits. Repair and maintenance of hermetic units. Calculation of heat loads. Equipment selection and system balance. The purpose, operating principles, installation and maintenance of the following: floats, automatic and thermostatic expansion valves, thermostatic and pressure motor controls, heat exchangers, oil separators, driers, suction filters and minor accessories. Installation, operation, service and trouble analysis of the following equipment: walk-in coolers, display cases, frozen food cabinets, reach-in cabinets, water coolers and ice makers. Also multiple compressor and evaporator system operation. Prerequisite: AHR 1102.

AHR 1104 Air Conditioning Controls I *5 0 3 6*

Theory of electrical and electronic controls. Principles of operations, application, connection and adjustment: pressure regulators and electrical thermostats, dual thermostats, heating-cooling thermostats and humidistats, valves, dampers and pilot positioners, non-bleed controllers, two-position controls. Theory of electrical controls. Principles of operation, application, wiring and adjusting: Series 20,60, and 90 controls. Prerequisite: None.

AHR 1105 Principles of Air Conditioning *5 0 9 8*

Introduction to air conditioning. Psychrometrics. Principles of load estimating. Air distribution. Applied load estimating. Residential and commercial equipment. Balancing the system. Prerequisite: None.

AHR 1106 Air Conditioning Controls II *3 0 3 3*

Theory of pneumatic controls. Principles of operations, pneumatic application, connection and adjustment: pressure regulators and pneumatic thermostats, dual thermostats, heating-cooling thermostats and humidistats, valves, dampers and pilot positioners, non-bleed controllers, two-position controls. Theory of electrical controls. Principles of operation, application, wiring and adjusting: Series 20, 40, 60 and 90 controls. Prerequisite: None.

AUTOMOTIVE

AUT 1111 Automotive Body Repair *3 0 12 7*

Basic principles of automobile construction, design, and manufacturing. A thorough study of angles, crown, and forming of steel into the complex contour of the present-day vehicles. Application of basic principles of straightening, aligning, and painting of damaged areas. Prerequisite: None.

AUT 1112 Automotive Body Repair *3 0 15 8*

A thorough study of the requirements for a metal worker, including the use of essential tools, forming fender flanges and beads, and straightening typical auto body damage. The student begins acquiring skills such as shaping angles, crowns, and contour of the metal of the body and fenders. Metal working and painting. Prerequisites: AUT 1111, WLD 1101.

AUT 1113 Metal Finishing and Painting *2 0 12 6*

Development of the skill to shrink stretched metal, soldering and leading, and preparation of the metal for painting. Straightening of doors, hoods, and deck lids; fitting and aligning. Painting fenders and panels, spot repairs, and complete vehicle painting; the use of application of power tools. Prerequisites: AUT 1112, WLD 1102.

AUT 1114 Frame Straightening and Alignment *2 0 6 4*

General introduction and instruction in the automotive frame and front end suspension systems, the methods of operation and control, and the safety of the vehicle. Unit job application covers straightening of frames and front wheel alignment. Prerequisite: AUT 1112.

AUT 1115 Body Shop Applications *3 0 21 10*

Application of all phases of training. Repair order writing, parts purchasing, estimates of damage, and developing the final settlement with the adjuster. Prerequisites: AUT 1113, AUT 1114.

AUT 1123 Automotive Chassis and Suspension Systems *4 0 15 9*

Principles and functions of the components of automotive chasis. Practical job instruction in adjusting and repairing of suspension and steering systems. Units to be studied: shock absorbers, springs, steering systems, steering linkage and front end and its alignment. Prerequisite: None.

AUT 1124 Automotive Power Trains *4 0 9 7*

Principles and functions of automotive power train systems: clutches, transmission gears, torque converters, drive shaft assemblies, rear axles and differentials. Identification of troubles, servicing, and repair. Prerequisite: None.

AUT 1125 Automotive Servicing *3 0 12 7*

Emphasis on the shop procedures necessary in determining the nature of troubles developed in the various component systems of the automobile. Trouble-shooting of automobile systems, providing a full range of experiences in testing, adjusting, repairing and replacing. Prerequisite: None.

PME 1101 Internal Combustion Engines *4 0 15 9*

Development of a thorough knowledge and ability in using, maintaining, and storing the various hand tools and measuring devices needed in engine repair work. Study of the construction and operation of components of internal combustion engines. Testing of engine performance; servicing and maintenance of pistons, valves, cams and camshafts, fuel and exhaust systems, cooling systems; proper lubrication, and methods of testing, diagnosing and repairing. Prerequisite: None.

PME 1102 Automotive Electrical Systems *4 0 15 9*

A thorough study of the electrical system of the automobile. Battery, cranking mechanism, generator, ignition, accessories and wiring; special tools, and testing equipment for the electrical system. Prerequisite: None.

PME 1103 Automotive Fuel Systems *1 0 3 2*

A study of the characteristics of fuels, types of fuel systems, fuel pumps, carburetors, fuel injectors, special tools and testing equipment for the fuel system. Prerequisite: None.

BIOLOGY

BIO 010 Human Anatomy 3 0 0 0

This course is designed to acquaint students with basic knowledge of human anatomy by tracing system pathways. The student may also gain proficiency in medical and biological terminology. Prerequisite: None.

BIO 101 General Biology I 3 2 0 4

A functional course in biology with emphasis on scientific reasoning, cellular structure and function, human anatomy and physiology, and the diversity of living organisms. Prerequisite: None.

BIO 102 General Biology II 3 2 0 4

A continuation of BIO 101 with emphasis on reproduction and development, inheritance, ecological principles, and evolution by natural selection. Prerequisite: BIO 101.

BIO 107 Anatomy and Physiology I 3 2 0 4

Students will be introduced in lecture to normal structure and function on a cellular level and will utilize this knowledge in gaining an understanding of the organization and function of the human body on tissue, organ, and organ system levels. When relevant, clinical applications are briefly made of such acquired knowledge, e.g. relation of information to basic pathological states.

Students are given the opportunity to employ their assimilated knowledge in class discussion and laboratory work. Topics covered include cytology, histology, the skeletal system, the muscular system, the nervous system, hematology, and cardiology. Prerequisite: None.

BIO 108 Anatomy and Physiology II 3 2 0 4

A continuation of BIO 107 with emphasis on the vascular system, respiratory system, digestive system, urinary system, fluid and electrolyte balance, endocrine system, and the reproductive system. Prerequisite: BIO 107

BIO 109 Health Services and Ethics 1 0 0 1

One part of this course will deal with an explantion of the role and function played by the various categories of Allied Health disciplines that comprise Allied Health programs. A study of community health resources will also be included. A second part of the course will deal with imparting an understanding of all aspects of medical ethics, including hospital professionalism and ethical therapist-patient interrelationships where applicable. In the third part of the course, the student shall be introduced to various library resources and keys to the use of each and shall be asked to prepare a written bibliography on an assigned topic. Prerequisite: None.

BIO 111 Microbiology 3 2 0 4

This is a one-quarter course designed to provide an understanding of microbiological principles and applications. Emphasis is placed on microbial classifications, structure and function, host-parasite relationships, and relations to man. Laboratory sessions are concerned with principles of identification, slide techniques, culture methods, and sterile procedures. Prerequisite: None.

BIO 112 Pathology 3 0 0 3

This course deals with the study of disease. The student will be taught the cause, pathogenesis, occurrence, complications, and prognosis of common diseases. Prerequisite: BIO 108, BIO 111.

BIO 115 Medical Terminology I 1 0 0 1

The first of a series of two courses in which the student is introduced to terms related to all areas of medical science, hospital service and paramedical specialties. Terms introduced parallel the topics covered in Anatomy and Physiology I.

BIO 116 Medical Terminology II 1 0 0 1

The second of a series of two courses in which the student is introduced to terms related to all areas of medical science, hospital service, and paramedical specialties. Terms introduced parrallel the topics covered in Anatomy and Phsiology II. Prerequisite: BIO 115.

BIO 139 Topographical Anatomy 2 0 0 2

The student receives a coordinated approach to aid him in visualizing his patient's anatomy. This reconstructional technique builds the body from its skelton toward the surface. Living anatomy is stressed throughout, so that surface landmarks and palpations are constant reminders of deeper structures. Prerequisites: BIO 107 and BIO 108.

BIO 169 Fundamentals of Disease Processes 4 0 0 4

The student is introduced to the major processes involved in producing pathological entities and disorders in man and how such states interfere with normal physiology. After this knowledge of diseases and abnormal states is acquired, it is correlated with the more commonly seen pathology in clinical practices. Emphasis will then be placed upon the fundamental principles of microbiology, the relationship of microorganisms to disease, modes of transmission, control and the etiological agents of infectious diseases. Prerequisites: BIO 107 and BIO 108.

BUSINESS

BUS 002 Introduction to Business Occupations 2 0 0 0

A course designed to familiarize the student with business curricula at Forsyth Technical Institute. The employment possibilities and further educational opportunities of graduates from two-year business curricula are explored.

BUS 010 Pre-Technical Accounting 5 0 0 0

Designed to present an overview of the complete bookkeeping cycle including journalizing, posting, summarizing, preparing of financial statements, and closing of books.

BUS 020 Clerical Practice 3 1 0 0

A course designed to acquaint the student with the responsibilities encountered by the office worker during the work day. These include the following: receptionist duties, handling the mail, telephone techniques, telegrams, office records, purchasing of supplies, and applying for a job.

BUS 030 Introduction to Shorthand 5 0 0 0

This course provides for the introduction of basic shorthand theory, dictation of practiced materials and transcription skills, and develops a fluent reading rate. This is an introduction to Shorthand I.

BUS 100 Rapid Calculations 3 0 0 3

A course designed to prepare the student to compute problems in arithmetic with a minimum of effort and time. Students will need to know the multiplication tables through twelve, memorize the squares of numbers through twenty-five. A knowledge of first year algebra will be helpful but not a prerequisite. After each method is learned, drill will be required for the purpose of reinforcing memory and developing speed. Prerequisite: None.

BUS 101 Introduction to Business 5 0 0 5

A survey of the business world with particular attention devoted to the structure of the various types of business organization, methods of financing, internal organization, and management. Prerequisite: None.

BUS 102 Typewritting I 2 0 3 3

Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts. Prerequisite: None.

BUS 103 Typewriting II 2 0 3 3

Emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. Includes application of these skills and techniques in tabulation, manuscripts, correspondence, and business forms. Prerequisite: BUS 102 or the equivalent.

BUS 104 Typewriting III 2 0 3 3

Emphasis on production typing problems and speed building. Attention to the development of the student's ability to function as an expert typist, producing mailable copies. The production units are tabulation, manuscript, correspondence, and business forms. Prerequisite: BUS 103 or the equivalent.

BUS 105 Typewriting IV 2 0 3 3

A continuation of BUS 104. Prerequisite: BUS 104 or equivalent.

BUS 106 Shorthand I 3 0 3 4

A beginning course in the theory and practice of reading and writing shorthand. Emphasis on phonetics, penmanship, word families, brief forms, and phrases. Prerequisite: None.

BUS 107 Shorthand II 3 0 3 4

Continued study of theory with greater emphasis on dictation and elementary transcription. Prerequisite: BUS 106 or the equivalent.

BUS 108 Shorthand III 3 0 3 4

Theory and speed building. Introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription. Prerequisite: BUS 107.

BUS 109 Business Mathematics 5 0 0 5

Emphasis on the fundamental operations and their application to business problems. Topics covered include sales records, inventories, commissions, markups, depreciation, and interest. Prerequisite: None.

BUS 110 Office Machines I 2 0 3 3

A general survey of the business and office machines. Emphasizes techniques, processes operation and application of the ten-key adding machines, full keyboard adding machines, and calculator. Prerequisite: None.

BUS 111 Techniques of Shorthand Transcription 3 0 0 3

Emphasis placed on the use of the dictionary and secretarial reference manual in producing mailable transcripts. The following items are included: expression of dates and numerical amounts; letter style, format, and placement; capitalization and punctuation; word spelling and division.

BUS 112 Techniques of Machine Transcription 2 0 3 3

Emphasis placed on the use of the dictionary and secretarial reference manual in producing mailable transcripts. The following items are included: expression of dates and numerical amounts; letter style, format, and placement; capitalization and punctuation; word spelling and division.

BUS 113 Vocabulary/Terminology I 3 0 0 3

Develops an understanding of the terminology and vocabulary appropriate to the course of study and as it is used in business, technical, and professional offices.

BUS 114 Vocabulary/Terminology II 3 0 0 3

Greater emphasis on the understanding of terminology and vocabulary in the business environment with special emphasis in such areas as the medical and legal professions as well as word processing.

BUS 115 Business Law I 3 0 0 3

A general course designed to acquaint the student with certain fundamentals and principles of business law. Includes contracts, negotiable instruments, and agencies. Prerequisite: None.

BUS 116 Business Law II 3 0 0 3

Includes the study of laws pertaining to bailment, sales, risk-bearing, partnership-corporation, mortgages, and property rights. Prerequisite: BUS 115.

BUS 120 Accounting I 4 0 3 5

The study of the principles, techniques, and tools of the accounting process. Includes the collecting, summarizing, analyzing and reporting of financial information. Emphasizes application of the principles learned. Prerequisite: None.

BUS 121 Accounting II 4 0 3 5

Major attention given to the procedures involved in the recording of receivables, payables, inventories, deferrals, accruals, plant assets, and payrolls. Emphasizes application of the processes learned. Prerequisite: BUS 120.

BUS 122 Accounting III 6 0 0 6

The study of accounting principles for partnerships and corporations. Major attention is given to accounting processes for financing the partnerships and corporation and the preparation of financial statements. Emphasizes applications of the processes learned. Prerequisite: BUS 121.

BUS 123 Business Finance I 3 0 0 3

A study of the principles and problems of financing business firms from the standpoint of maintaining solvency. Emphasizes shortterm financing in relation to uses, sources, and management of credit. Introduction of long-term debt and equity financing. Prerequisite: BUS 120.

BUS 124 Business Finance II 3 0 0 3

A study of long-term financing. Emphasis on equity financing within the corporation. Topics include the securities, markets, and investment companies; growth through acquisition; and liquidation procedures. Prerequisite: BUS 123.

BUS 125 Accounting Practice Set 1 0 0 1

A comprehensive practice set involving the principles learned in Accounting I, Accounting II, and Accounting III. The practice set will include business transactions common to both sole proprietorships and corporations. Prerequisite: None.

BUS 162 Fundamentals of Real Estate I 3 0 0 3

Fundamental principles and theories of real estate are covered including terminology, North Carolina's licensing laws, ethics, legal environment, forms and instruments, mathematics, finance; closing statements and procedures. Prerequisite: None.

BUS 163 Fundamentals of Real Estate II 3 0 0 3

This course is a continuation of BUS 162 Fundamentals of Real Estate I. Theory and practice of real estate are covered including methods of financing, appraisals, advertising and marketing. Prerequisite: BUS 162.

BUS 164 Real Estate Law 5 0 0 5

A survey course of law as it relates to real estate activities including the legal aspects pertaining to the sale, purchase, and management of real property. Special emphasis is placed on the legal steps needed to handle real estate transactions from the preparation of the listing contract to the closing statement. Prerequisite: None.

BUS 205 Typewriting V 2 0 3 3

Emphasis placed on the development of individual production rates. Emphasizes the techniques needed in planning and in typing projects that closely approximate the work appropriate to the field of study. Projects include review of letter forms, methods of duplication, statistical tabulation, and the typing of reports, manuscripts and legal documents. Prerequisite: BUS 105.

BUS 206 Dictation and Transcription 3 0 3 4

Develops the skill of taking dictation and of transcribing at the typewriter materials appropriate to the course of study. Includes a review of the theory and the dictation of familiar and unfamiliar material at varying rates of speed. Minimum dictation rate of 100 words per minute required for five minutes on new material. Prerequisite: BUS 108.

BUS 207 Dictation and Transcription 3 0 3 4

Emphasizes accuracy, speed, and vocabulary that will enable student to meet the stenographic requirements of business and professional offices. Minimum dictation rate of 110 words per minute required for five minutes on new material. Prerequisite: BUS 206.

BUS 208 Dictation and Transcription 3 0 3 4

Principally a speed building course, covering materials appropriate to the course of study, with emphasis on speed as well as accuracy. Minimum dictation rate of 120 words per minute required for five minutes on new material. Prerequisite: BUS 207.

BUS 209 Real Estate Finance 5 0 0 5

A study of real estate finance including an analysis of financial institutions, techniques, and instruments necessary in real estate. Topics include the sources of funds, types of mortgages, role of government agencies, interest rates, loan costs and closings and competition in the money market.

BUS 211 Office Machines II 2 0 3 3

Instructions in the operation of the bookkeeping-accounting machines, duplicating equipment, and the dictating and transcribing machines. Prerequisite: BUS 103.

BUS 212 Machine Transcription I 2 0 3 3

Develops the skill of direct transcription from oral dictation to mailable typewritten form, which involves correct punctuation, spelling, and typing styles.

BUS 213 Filing 3 0 0 3

Fundamentals of indexing and filing, combining theory and prartice by the use of miniature letters, filing boxes and guides. Alphabetic, Triple Check, Automatic, Geographic, Subject, Soundex, and Dewey Decimal filing. Prerequisite: None.

BUS 214 Secretarial Procedures 4 0 6 6

Designed to acquaint the student with the responsibilities encountered by a secretary during the work day. Includes receptionist duties, handling the mail, telephone techniques, travel information, telegrams, office records, purchasing of supplies, office organization, and insurance claims. Prerequisite: Open to second year students only.

BUS 215 Machine Transcription II 2 0 3 3

Builds speed in the skill of direct transcription from oral dictation to a mailable typewritten form, which involves correct punctuation, spelling, and typing styles. Prerequisite: BUS 212.

BUS 216 Real Estate Sales 3 0 0 3

A study of the current sales techniques in the real estate industry, including problems in selling as well as emphasis on consumer motivation and reactions. Particular emphasis is placed on morals and ethics related to the sale of real property. Other topics include the methods of securing property listings and prospective customers, bringing the prospect and property together, the use of advertising in the selling function, the basic development of a sales plan and sales presentation. Prerequisite: None.

BUS 219 Office Application 2 0 12 6

During the last quarter only, students are assigned to work in a business or professional office for 20 hours per week. The objective is to provide actual work experience for secretarial students and an opportunity for the practical application of the skills and knowledge previously learned.

BUS 221 Intermediate Accounting I 5 0 0 5

Thorough treatment of the field of general accounting, providing the necessary foundation for specialized studies that follow. The course includes, among other aspects, the balance sheet, income and surplus statements, fundamental processes of recording, cash and temporary investments, and analysis of working capital. Prerequisite: BUS 122.

BUS 222 Intermediate Accounting II 5 0 0 5

Additional study of intermediate accounting with emphasis on investments, plant and equipment, intangible assets and deferred charges, long-term liabilities, paid-in capital, retained earnings, and special analytical processes. Prerequisite: BUS 221.

BUS 223 Governmental Accounting 3 0 0 3

A study and application of principles of accounting and budgeting as they apply to municipal, state, and federal governmental units. Prerequisite: BUS 221.

BUS 225 Cost Accounting I 3 0 0 3

The study of principles, techniques, and tools of the cost accounting processes within the job cost and process cost system. Emphasis on application of principles learned. Prerequisite: BUS 122.

BUS 226 Cost Accounting II 3 0 0 3

A continuation of Cost Accounting I, with emphasis on standard cost principles and procedures; selling and distribution cost; direct costs; budgets and executive use of cost figures. Prerequisite: BUS 225.

BUS 227 Advanced Accounting 3 0 0 3

A study of advanced principles and practices. Special emphasis is placed on the development of worksheet techniques for solution of problems. Accounting procedures related to partnerships, branch accounting and parent-subsidiary relationships are studied in depth. Current publications from professional journals are studied and discussed. Prerequisite: BUS 222.

BUS 228 Real Estate Investments and Taxation 3 0 0 3

A study of fundamental investment concepts including location, timing and methods of financing, designed to provide the prospective investor with a guide to successful real estate investment. Emphasis will be placed on investment during the development process, what to buy and how to buy. Other topics to be discussed are how to take title for individual ownerships or partnerships, when to invest in real estate corporations and trusts, tax consequences and investment, and the influence of federal and state laws on real estate investments. Prerequisite: None.

BUS 229 Taxes 3 0 0 3

A study and application of federal and state taxes as applied to individuals, partnerships, and corporations. Emphasizes the preparation of individual income tax returns. Prerequisite: None.

BUS 230 Advanced Taxes 3 0 0 3

(A continuation of BUS 229)

A study and application of federal and state taxes as applied to individuals, partnerships, and corporations. Emphasizes the preparation of individual income tax returns.

BUS 231 Real Estate Merchandising 3 0 0 3

A survey of the field of real estate advertising with emphasis on the relationship to the market structure of our economy. Prerequisite: None.

BUS 232 Sales Development 3 0 0 3

A study of retail, wholesale and specialty selling. Emphasizes the mastering and the application of the fundamentals of selling. Preparation for and execution of sales demonstrations required. Prerequisite: None.

BUS 233 Personnel Management 3 0 0 3

Principles of organization and management of personnel, procurement, placement, training, performance checking, supervision, remuneration, labor relations, fringe benefits and security.

BUS 234 Advanced Sales 3 0 0 3

A continuation of Sales Development, BUS 232.

BUS 235 Business Management 3 0 0 3

The study of major functions of management such as planning, staffing, controlling, and financing. Particular emphasis placed on factors and problems involved in starting a new business. Students encouraged to think and act the roles of entrepreneur and manager. Prerequisite: None.

BUS 236 Land Development 3 2 0 4

A study of the land and population economics of land utilization and the development factors related to manufacturing, labor, transportation and commerce in or near the development location. Prerequisite: None.

BUS 237 Wholesaling 3 0 0 3

A comprehensive analysis of the wholesaling function emphasizing the principles and techniques employed by today's wholesale managers. The role of wholesaling in our distribution system and its relation to production and retailing are thoroughly analyzed. Prerequisite: None.

BUS 238 Land Use Policy and Governmental Influences on Real Estate 3 2 0 4

A study of the local and national trends in the development, use and value of real property, as well as governmental policies and their effect on the real estate market. Skills are developed in the analysis, research and correlation of the various trends, policies, and factors affecting real estate. Prerequisite: None.

BUS 239 Marketing 5 0 0 5

A study of the principles and problems of marketing goods and services in a free enterprise economy. Emphasizes product selection and development, promotion, channels of distribution and pricing. Prerequisite: None.

BUS 240 Credit Procedure 3 0 0 3

Principles and practices in the extension of credit; including revolving credit, installment sales, and credit card systems. Collection procedures and laws pertaining to credit extension and collection. Prerequisite: None.

BUS 241 Social Stratification 3 0 0 3

An analytic approach to the existence of social classes in nearly all societies while offering specific concepts and research on buying, living, and social stratification in the United States. Prerequisite: None.

BUS 242 Display and Design 3 2 0 4

Internal — An introduction to basic layout and design of commercial displays, retail stores, and service institutions. Prerequisite: None.

BUS 243 Advertising 4 0 0 4

The study of the methods and techniques used by ad men and agencies to persuade the public to buy. Topics covered are market research, selection of media, and evaluation and testing of ad effectiveness. Theory and practice in writing and designing ad copy included in class activity. Prerequisite: None.

BUS 244 Marketing Research 4 2 0 5

Research methods, procedure, techniques. Included will be finance, statistics, sampling, collection of data. A practical field problem will be integrated. Prerequisite: None.

BUS 245 Retailing 3 0 0 3

A study of the role of retailing in our distribution system. Topics include the development of present retail practices, functions performed, principles governing effective operation, and managerial problems resulting from current economic and social trends. Prerequisite: None.

BUS 247 Business Insurance 3 0 0 3

A presentation of the basic principles of risk insurance and their application. A survey of the various types of insurance is included. Prerequisite: None.

BUS 249 Marketing-Retailing Seminar 3 0 12 7

Provides a student with an opportunity to pursue, under supervision, work experience in the field of marketing, thus giving realism and motivation to his field of study. Prerequisite: None.

BUS 252 Insurance and Risk 3 0 0 3

A study of risk and insurance coverages. Emphasis on insurance buying and selling behavior found in industrial, ordinary, liability and health and accident insurance policies. Prerequisite: None.

BUS 253 Money and Banking 3 0 0 3

The essentials for an understanding of our monetary system including creation of money, bank management, business fluctuations, monetary and fiscal policy and control techniques, balance of payments and foreign exchange. Prerequisite: None.

BUS 255 Real Estate 3 0 0 3

A study of the basic principles of buying and selling real estate. Emphasizing both industrial and consumer real estate. Prerequisite: None.

BUS 262 Fashion Merchandising 3 2 0 4

Designed to acquaint the student with fashion and style, characteristics of style, trends, coordination of color and design analysis. Prerequisite: None.

BUS 269 Auditing 3 0 0 3

A study of the theory and practices of auditing, including professional standards and rules of conduct. Emphasis is placed on specific techniques of auditing various balance sheet accounts. Comparative analysis using rapid calculation procedures will be stressed. Study also includes detailed audits, internal auditing and internal control. Current trends in statement preparation are reviewed. Prerequisite: BUS 222.

BUS 271 Office Management 3 0 0 3

A study of the planning, organizing, and controlling of office facilities, equipment and personnel. Emphasis placed on the role of the office manager. Prerequisite: None.

BUS 272 Principles of Supervision 3 0 0 3

A study of the basic responsibilities of the supervisor and his relationship to supervisors, subordinates and associates. Emphasizes methods of supervision and problem solving through case studies.

BUS 292 Appraisal I 3 0 0 3

A study of the principles and theory of appraising real property. Topics studied include site evaluation, building materials and components, methods of appraising property, professional organizations and developing and operating an appraisal business. Prerequisite: None.

BUS 293 Appraisal II 3 2 0 4

A study of the methods and techniques used in estimating the value of residential properties. Topics include analysis of economical factors affecting the value of real estate, local, state, federal and neighborhood influences and attitudes, economical factors, and estimation of value. Prerequisite: Appraisal I. BUS 292.

BUS 294 Appraisal III 3 2 0 4

A study of the capitalization of income and the income approach to value. Topics covered include an analysis of steps to estimate the value of income-producing properties such as apartments, hotels, motels, office buildings, retail stores, industry, etc.; interest rates; recapture rates; capitalization rates; and appraisal of lease interests. Prerequisite: Appraisal II. BUS 293

BUS 296 Property Management 3 0 0 3

A study of the nature of property management, the types of property, lease preparation, protection of property and property maintenance. Other topics include fair housing, tenant selection, advertising, ethics, budgeting, and associations with people. Prerequisite: None.

BUS 1103 Small Business Operations 3 0 0 3
An introduction to the business world, problems of small business operation, basic business law, business forms and records, financial problems, ordering and inventorying, layout of equipment and offices, methods of improving business, and employer-employee relations. Prerequisite: None.

BUS 1105 Industrial Organizations 3 0 0 3
Methods, techniques, and practices of modern management in planning, organizing and controlling operation of a manufacturing concern. Introduction to the competitive system and the factors constituting product cost. Prerequisite: None.

BUS 1106 Free Enterprise System 3 0 0 3
The fundamental principles of economics including the institutions and practices by which people gain a livelihood in a capitalistic economy. A study of the laws of supply and demand and the principles bearing upon production, money exchange, distribution, and consumption in relation to individual enterprise and to society at large. Designed to give the student an understanding of the economic world in which he lives and its relationship to his social world. Prerequisite: None.

BUS 1122 Typing I 2 0 3 3
Introduction to the touch typewriter system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts. Prerequisite: None.

CARPENTRY

CAR 1101 Framing, Sheathing and Insulation I 2 0 18 8
Instruction in the principles and practices of frame construction beginning with the foundation sills and including: floor joist, subfloor, wall studs, ceiling joist, rafters, bridging, bracing, sheathing, and interior wall partition. Layout and construction methods of common types of roofs using standard rafter construction, truss construction, and post and beam construction. Application and selection of sheathing and roofing. Consideration given to the coordination of carpentry work with installation of the mechanical equipment such as: electrical, air conditioning, heating, and plumbing. Prerequisite: None.

CAR 1102 Framing, Sheathing and Insulation II 3 0 18 9
A continuation of CAR 1101. Prerequisite: None.

CAR 1103 Interior and Exterior Trim 3 0 21 10
Cornice work, siding installation of windows and doors emphasized. Prerequisite: None.

CAR 1105 Finish Work 6 0 21 13
Exterior and interior trim and finish carpentry to complete the general carpentry program. Materials and methods used in finishing carpentry such as: exterior cornice, door and window trim; interior flooring, door and window facing, moldings, and cornice construction; installation of hardware, construction and installation of built-in equipment and cabinets. Millwork as performed by the general carpenter for building construction. Prerequisite: None.

CAR 1114 Building Codes 3 0 0 3
Study of applicable sections of city, state, and national codes. Material correlated with all other carpentry courses. Prerequisite: None.

CHEMISTRY

CHM 010 Chemistry — Pre-Technical 3 2 0 0

This is an elementary course in chemistry equivalent to high school. It provides the necessary foundation in chemistry for students who enter: (1) a physical science technical curriculum which requires chemistry at the beginning, or (2) a technical program based on the biological sciences.

Topics and laboratory experiments are planned to teach chemistry which is related to the various chemical aspects of biological science. Laboratory exercises and experiments are designed to teach the fundamentals of chemistry and develop chemical laboratory skills.

CHM 101 Chemistry 4 2 0 5

Study of the physical and chemical properties of substances, chemical changes, elements, compounds, gases, chemical combinations, weights and measurements, theory of metals, acids, bases, salts, solvents, solutions, and emulsions. In addition, study of carbohydrates, electrochemistry, electrolytes, and electrolysis. Industrial and agricultural applications are emphasized.

CHM 103 Chemistry 3 2 0 4

Students will be introduced in lecture to important chemical principles fundamental to the understanding of life processes. This will include a foundation in general and organic chemistry followed by the essential features of organic chemistry which lays the groundwork for the study of the biochemistry of living systems.

Students are afforded the opportunity to expand their knowledge through classroom discussion and through laboratory work. The laboratory experiments are designed in some cases to introduce specific principles and in other cases to supplement and reinforce material introduced in lecture.

CHM 104 Organic and Biochemistry 3 2 0 4

To familiarize the student with the nomenclature, variety, usefulness and most significant topics in organic and biochemistry. Prerequisite: CHM 103.

CIVIL ENGINEERING

CIV 101 Surveying 2 0 6 4

Theory and practice of plane surveying including taping, differential and profile leveling, cross sections, earthwork computations, transit, stadia, and transittape surveys. Prerequisite: None.

CIV 105 Architectural Materials and Methods 3 2 0 4

Emphasizes materials used in the construction of architectural structures. Field trips to construction sites and study of manufacturer's specifictions for materials. Properties and standard sizes of structural materials, and construction techniques included. Prerequisite: None.

CIV 218 Plain Concrete 3 0 0 3

Study of the composition and properties of concrete including cementing agents, aggregates, admixtures, and air entrainment; design and proportioning of concrete mixes to obtain predetermined strengths and properties; methods of placing and curing concrete; standard control tests of concrete. Prerequisite: None.

CIV 1101 Surveying 2 0 3 3

Basic instrumentation and topography, together with field trips and drafting room application of site surveying. Prerequisite: None.

DIESEL

DSL 1101 Diesel Engines 4 0 15 9

Development of a general understanding of the basic principles involved in the construction and operation of diesel engines; also, thermodynamic concept of cycles related to the diesel engines. An elementary study of performance characteristics of diesel engines and basic design in fuel systems. Work includes such overhaul jobs as grinding valves, gaging cylinder wear, removing and replacing cylinder liners, boring cylinders, replacing and adjusting bearings, gaging and installing piston rings. Prerequisite: None.

DSL 1102 Diesel Electrical and Fuel Systems 4 0 15 9

A course designed to familiarize the student with the constructional and operational features of the electrical units which are used on preheating, starting and generating systems of diesel engines. Student activities in reconditioning techniques of generators, starters, and alternators. Use of test equipment for measurement, adjustment and trouble shooting included. Prerequisite: None.

DSL 1103 Diesel Fuel Injection 2 0 6 4

Theory related to a study of the variations in design and the principles of operation of fuel injection systems used on the automotive diesel engine. Practice work designed to familiarize the student with the operation, maintenance and testing of the units which comprise the fuel injection systems of diesel engines. Teaches student to maintain, repair, and test such units as fuel pumps, transfer pumps, spray nozzels and unit injectors. Prerequisite: None.

DSL 1104 Power Trains, Chassis & Suspension Systems 4 0 15 9

Instruction given in the construction features and operating principles of truck chassis, suspension, steering and brake systems. Teaches student to operate equipment to correct and adjust abnormalities in suspension and steering. Familiarization with the variations in design and functioning of brake systems as used by heavy trucks. Study of the construction and operation of such component parts as clutches, transmissions, propeller shafts and rear axles. Prerequisite: None.

DSL 1105 Diesel Servicing 5 0 15 10

A course intended for those who desire to become proficient in the field of diesel diagnosis and repair. Vehicles first given a complete checkout to determine the trouble, and the trouble corrected on the basis of the diagnostic report. Training provided on all major mechanical and electrical units. Preventive maintenance and servicing techniques taught as recommended by manufacturers. Prerequisites: None.

DRAFTING

DFT 101 Technical Drafting I 2 0 6 4

Introduction of the field of drafting as the student begins study of drawing principles and practices for print reading and describing objects in the graphic language. Includes use of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric construction, orthographic instrument drawing (principal views). Dimensioning practices for "details" and "working drawings" as approved by the American Standards Association. Prerequisite: None.

DFT 102 Technical Drafting II 2 0 6 4

Includes the application of orthographic projection principles to the more complex drafting problems, primary and secondary auxiliary views, simple and successive revolutions, sections and conventions. Introduces the graphical analysis of space problems. Includes study of problems of practical design elements involving points, lines, planes, and combinations of these elements. Includes intersections and developments with their practical solutions. Includes model solutions with problems where applicable. Prerequisite: DFT 101.

DFT 103 Technical Drafting III *2 0 6 4*

A study of the various techniques employed to produce and render isometric and oblique drawings and isometric, dimetric, and trimetric projections. Also includes applications and construction of charts, graphs, and nomographs in engineering and technical data, piping, welding symbols, and methods of representing and specifying. Prerequisite: DFT 102.

DFT 106 Architectural Drafting I *2 0 6 4*

A course designed to provide fundamental knowledge of the principles of drafting. Basic skills and techniques of drafting include use of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric construction, orthographic instrument drawing of principal views. Projection problems dealing with principles of descriptive geometry involving points, lines, planes, and connectors. The principles of isometric, oblique, and perspective drawings introduced. Prerequisite: None.

DFT 107 Architectural Drafting II *2 0 6 4*

Development of techniques in architectural lettering, symbols, and their interpretation: dimensioning, freehand and instrument drafting. Drawings of construction details, using appropriate material symbols and connections. Sections, scale details and full-size details prepared from preliminary sketches. Applications of descriptive geometry use in visualization and analytical solutions of the drafting problems involving auxiliary views, intersections and developments. Prerequisite: None.

DFT 108 Architectural Drafting III *0 0 9 3*

An approach in depth to the study of architectural drafting. Development of techniques in architectural lettering, dimensioning, freehand sketching and instrument drawing. Drawings of construction details, using appropriate material symbols and conventions. Working drawings, including plans, elevations, sections, scale details and full-size details to be prepared from preliminary sketches. Prerequisites: None.

DFT 150 Site Planning *2 0 6 4*

Introduction to factors influencing placement of buildings on sites. Specific analysis of sites in terms of solar, topographic, use and wind characteristics. Includes field work in surveying.

DFT 181 History of Architecture and Construction *5 0 0 5*

Covers the evolution of building development from primitive to modern. Concerned with the chronological history of architectural construction and design. The principal periods studied: Pre-history, Ancient Egypt and Mesopotamia, Greece, Rome, Romanesque, Gothic, Renaissance, Early American, and Modern. Prerequisite: None.

DFT 192 Orientation to Design Drafting *1 0 0 1*

Designed to acquaint the students with the field and with future employment opportunities. Identifies the role of the draftsman. Prerequisite: None.

DFT 204 Descriptive Geometry *3 0 3 4*

Graphic analysis of space problems involving points, lines, planes, connectors, and a combination of these. Practical design problems stressed with analytical verification where applicable. Visualization stressed on every problem. Prerequisites: DFT 101.

DFT 205 Design Drafting I *3 2 0 4*

Introduces basic design in the study of motion, transfer mechanisms as they relate to power trains. Includes principles of design sketching, design drawing, layout drafting, detailing from layouts, production drawings and simplified drafting practices. Types and methods of specifying materials and workmanship integral part of the course. Prerequisites: DFT 103.

DFT 206 Design Drafting II *2 6 0 4*

Research to solve a problem in design by consulting various manuals, periodicals, and through laboratory experiments. A written technical report, preliminary design sketches, layout drawings, detail drawings, assembly, and subassembly drawings, and specifications required as a part of the problem. Prerequisite: DFT 205, DFT 260.

DFT 211 Mechanisms 3 0 3 4

Mathematical and drafting room solutions of problems involving the principles of machine elements. Study of motions of linkages, velocities and acceleration of points within a link mechanism; layout methods for designing cams, belts, pulley, gears and gear trains. Prerequisites: DFT 206, MAT 103, MEC 104.

DFT 212 Jig and Fixture Design 3 0 6 5

Commercial standards, principles, practices and tools of jig and fixture design. Individual project and design work to acquaint students with the types of jigs and fixtures and their design. Prerequisities: DFT 211, DFT 223.

DFT 220 Architectural Drafting IV 2 0 9 5

Drawing of structural plans and details as prepared for building construction, including steel, concrete, and timber structural components. Appropriate details and drawings necessary for construction and fabrication of structural members. Reference materials used to provide the draftsman with skills and knowledge in locating data and in using handbooks. Prerequisite: None.

DFT 221 Architectural Drafting V 2 0 9 5

Drawing of plans and details as prepared for mechanical equipment such as air conditioning, plumbing and electrical systems by using appropriate symbols and conventions. Consideration given to coordination of mechanical and electrical features with structural and architectural components. Prerequisite: None.

DFT 222 Architectural Drafting VI 2 0 9 5

Preparation of the complete set of working drawings for the architectural structure. Preparation of millwork drawings, cabinets and built-in equipment detail drawings, and door, window, and room schedules. Site and landscaping plans studied and drawn. A final assembly of the complete document for construction pruposes. Prerequisite: None.

DFT 223 Design Drafting III 3 0 6 5

Basic fundamentals of punch and die design. Commercial standards and principles of blanking, piercing, bending and forming dies; including compound and progressive. Electro-mechanical drawings of printed circuits, wiring diagrams, and schematics. Prerequisite: DFT 206.

DFT 224 Product Design 2 0 6 4

The bringing together of original idea, scientific theory involved, applicable product history, limiting manufacturing boundaries, aesthetic importance, and marketability considered with study given to relative importance and intended design goal. Prerequisites: DFT 211, DFT 223.

DFT 233 Office Practice Seminar 2 0 0 2

A study of the professional relationship of the architectural firm in relation to clients, contractors, suppliers, consultants and other architects. Ethics of the professional as applicable to the draftsman's role in the architectural firm stressed. Prerequisite: None.

DFT 235 Codes, Specifications and Contract Documents 3 0 3 4

A study of building codes and their effect in relation to specifications and drawings. The purpose and writing of specifications studied along with their legal and practical application to working drawings. Contract documents analyzed and studied for the purpose of client-architect-contractor responsibilities, duties and mutual protection. Prerequisite: None.

DFT 236 Construction Estimating and Field Inspecting 3 0 3 4

Interpretation of working drawings for a project; preparation of material and labor quantity surveys from plans and specifications; approximate and detailed estimates of cost. Includes study of materials take-off, labor take-off, subcontractors' estimates, overhead costs, and bid and contract procedures. Detailed inspection of the construction by comparing finished work to the specifications. Prerequisite: None.

DFT 250 Architectural Media 3 0 0 3

This course will give the student a basic understanding of the use of photography, sketching, rendering, model building, and the combination of graphic arts in the presentation of architectural design.

DFT 255 Twentieth Century Architecture 3 0 0 3

Student awareness, consideration and criticism of the diverse forces on the aesthetic, constructional and design theories active in the field of architecture today. Prerequisite: None.

DFT 260 Dimensioning and Tolerancing 1 0 3 2

Standard Drafting Practices per USASI Y 14.5. Includes general dimensioning; general applications of tolerances and limits; tolerance of position and form; advantages of true position tolerancing. Prerequisite: DFT 103.

DFT 1101 Schematics and Diagrams 0 0 3 1

Interpretation and reading of blueprints. Development of ability to read and interpret blueprints, charts, instruction and service manuals, and wiring diagrams. Information on the basic principles of lines, views, dimensioning procedures, and notes. Prerequisite: None.

DFT 1104 Blueprint Reading: Mechanical I 0 0 3 1

Intrepretation and reading of blueprints. Information on the basic principles of the blueprint; lines, views, dimensioning procedures and notes. Prerequisite: None.

DFT 1105 Blueprint Reading: Mechanical II 0 0 3 1

Further practice in interpretation of blueprints as they are used in industry; study of prints supplied by industry; making plans of operations; introduction to drafting room procedures; sketching as a means of passing on ideas, information and processes. Prerequisite: None.

DFT 1106 Blueprint Reading: Mechanical III 0 0 3 1

Advanced blueprint reading and sketching as related to detail and assembly drawings used in machine shops. The interpretation of drawings of complex parts and mechanisms for features of fabrication, construction and assembly. Prerequisite: None.

DFT 1107 Blueprint Reading 0 0 3 2

Interpretation and reading blueprints applicable to air conditioning, heating and refrigeration. Development of ability to read and interpret floor plans, elevations, sections, and details found on pictorial, perspective, isometric, oblique, and three-view drawings.

DFT 1110 Blueprint Reading 0 0 3 1

Principles of interpreting blueprints and trade specifications common to the building trades. Development of proficiency in making three view and pictorial sketches. Prerequisite: None.

DFT 1111 Blueprint Reading 0 0 3 1

Principles of interpreting blueprints and specifications common to the building trades. Practice in reading details for grades, foundations, floor plans, elevations, walls, doors and windows, and roofs of buildings. Development of proficiency in making three view and pictorial sketches. Estimating from blueprints. Prerequisite: None.

DFT 1112 Drafting I: Plumbing 1 0 3 2

Review of blueprint reading, instruction in the selection, use and care of basic drafting instruments. Single stroke freehand lettering. Orthographic projection consisting of instruments and freehand sketching. Study of dimensioning and note practices with reference to the American Standard Association practices. Includes methods of reproducing drawings; detail, assembly, layout and pictorial drawings; specifications, parts list and bill of materials. Drawings of piping includes: metal pipe, tubing, plastic pipe, pipe joints, tube joints, pipe fittings, valves, specification of fittings, pipe threads, specification of threads, scale layout (two line drawing) and diagrammatic (single line) drawings. (Diagrammatic methods include orthographic, developed and pictorial.) Standard symbols, dimensioning of a pipe drawing, and pipe hangers and supports. Students work to include various problems of piping layout to scale. (Note — school will furnish drafting equipment.) Prerequisite: None.

DFT 1113 Blueprint Reading: Electrical *0 0 3 1*

Interpretation of schematics, diagrams and blueprints applicable to electrical installations with emphasis on electrical plans for domestic and commercial installations using appropriate symbols and notes according to the applicable codes. Prerequisite: None.

DFT 1121 Drafting I *4 0 12 8*

An introduction to drafting and the study of drafting practices. Instruction in the selection, use and care of instruments, singlestroke lettering, applied geometry, freehand sketching consisting of orthographic and pictorial drawings. Emphasis on orthographic projection, reading and instrument drawing of principal views, single auxiliary views (primary), and double (oblique) auxiliary views. Study of dimensioning and note practices with reference to the American Standards Association practices. Methods of reproducing drawings included at the appropriate time. Prerequisite: None.

DFT 1122 Drafting II *4 0 12 8*

Study of simple and successive revolutions and their application to practical problems. Study of section and conventions and drawing of both detail and assembly sections. Study of intersections and developments by relating the drawing to the sheet metal trades. Models of the assigned drawings to be made from construction paper, cardboard, or similar materials as a proof of the solution to the problems drawn.

Study of methods of drawing and projecting axonometric, oblique, and perspective drawings with emphasis on the practical applications of pictorial drawings. Introduction of various methods of shading and performance of dimensioning and sectioning of oblique and axonometric pictorials. Prerequisite: DFT 1121.

DFT 1125 Descriptive Geometry *2 0 3 3*

Graphical analysis of space problems. Problems to deal with practical design elements involving points, lines, planes, connectors, and a combination of these. Includes problems dealing with solid geometry theorems. Analytical as well as graphical solution wherever applicable. Prerequisite: DFT 1121.

DFT 1131 Mechanical Drafting *2 0 12 6*

An introduction to mechanical drafting beginning with problems concerning precision and limit dimensioning. Methods of fastening materials, and fasteners: keys, rivets, springs, and welding. Study and use of symbols in drawings. Principles of design introduced with the study of basic mechanisms of motion transfer: gears, cams, power trains, pulleys, belting and methods of specifying and calculating dimensions. Drawings involving these mechanisms. Prerequisite: DFT 1122.

DFT 1132 Mechanical Drafting *2 0 12 6*

Principles of design sketching, design drawings, layout drafting, detailing from layout drawings, production drawings and simplified drafting practices. Forging and casting drawings from layouts. Emphasizes specifications, parts list and bill of materials. Development of a complete set of working drawings of a tool, jig, fixture or simple machine. Teaches principles of design, handbook and manual usage. Prerequisite: DFT 1131.

DFT 1141 Drafting III *4 0 15 9*

An introduction to architectural drafting. Further development of techniques in lettering, dimensioning, freehand sketching and instrument drawings. Drawings of construction details, using appropriate material symbols and conventions. Working drawings, including plans, elevations, sections, scale details and full-size details prepared from preliminary sketches. Prerequisite: DFT 1122.

DFT 1142 Drafting IV 4 0 15 9

Individual and group participation in the preparation of complete working drawings for a complex architectural structure. Study of drafing room organization and relationships of personnel within the architectural office. Prerequisites: DFT 1141, DFT 1143, DFT 1144.

DFT 1143 Building Mechanical Equipment 3 0 0 3

General study of heating, air conditioning, plumbing and electrical equipment, materials and symbols. Building code requirements pertaining to residential and commercial structures. Reading and interpretation of working drawings by mechanical engineers. Prerequisite: DFT 1122.

DFT 1144 Building Materials and Methods 3 0 0 3

Study of materials used in the construction of architectural structures. Their economic values and limitations affected by locality, budget and codes. Field trips to construction sites and study of manufacturer's specifications for materials. Standard sizes of structural materials and modular construction techniques. Prerequisite: None.

DFT 1150 Site Planning 2 0 3 3

Introduction to factors influencing placement of buildings on sites. Specific analysis of sites in terms of solar, topographic, use and wind characteristics. Includes field work in surveying.

ECONOMICS

ECO 102 Economics I 3 0 0 3

A study of macroeconomics, which treats the economy as a whole. Included is a study of Gross National Product, full employment, business fluctuations, economic growth, and the expansion of bank credit. Prerequisite: None.

ECO 104 Economics II 3 0 0 3

A further study into the function of the United States' economy as well as a look into world economics. A study of prices, competition, nonprice competition and income distribution in the United States. Includes a study of international trade and payments, economic development, and comparative economic systems. Prerequisite: ECO 102.

ECO 108 Consumer Economics 3 0 0 3

Designed to help the student use his resources of time, energy, and money to get the most out of life. It gives the student an opportunity to build useful skills in buying, managing his finances, increasing his resources and to understand better the economy in which he lives. Prerequisite: None.

EDUCATION

EDU 101 Child Growth and Development 5 0 0 5

The study of the mental and physical growth of the child from birth through adolescence. Through a brief review of recent studies in child development, the student will gain knowledge of frequently used educational research methods and research terminology. Prerequisite: None.

EDU 102 Programming for Young Children 3 2 3 5

A comparative study of traditional, current, and innovative preschool programs. The laboratory experience provides opportunities for the students to observe and record the growth and behavior of young children. The practicum experience provides an opportunity to work with young children and to participate in planning activities, in defining the adult role and in developing techniques for managing children in groups. Prerequisite: EDU 101.

EDU 103 Working with Young Children 4 0 10 5

Case presentations, films, observations, and group discussions are utilized to study characteristic behaviors of each level of development and to derive guidelines for promoting desirable behaviors and for coping with undersirable behaviors. Laboratory experiences will provide opportunities to develop observation skills, effective techniques, and beginning skill in adapting activities to the needs of individual children. Through coordination with PSY, theories from behavioral science are identified as the foundation of techniques for working with young children. Prerequisite: EDU 102.

EDU 104 Art for Young Children 3 0 0 3

A study of the art of young children and the development of techniques of working with young children to encourage creative expression through a variety of media. Prerequisite: EDU 101.

EDU 105 Music for Young Children 3 0 0 3

An exploration of a wide variety of musical activities for young children with special emphasis on techniques of selecting activities appropriate to the age level and the individual needs of the children. Prerequisite: EDU 101.

EDU 106 Activities for Young Children
Science and Mathematics 5 0 10 6

Individual and group exploration of activities and materials for developing mathematics and science experiences for preschool children which would permit the children to learn through manipulation, experimentation, and discovery. The laboratory experience provides opportunities to implement activities with children. Prerequisite: EDU 201.

EDU 201 Activities for Young Children
Language Arts and Social Studies 5 0 10 6

A comprehensive study of each facet of language arts and social studies with emphasis on techniques of designing activities and selecting materials to promote optimal overall development and to meet the specific needs of individual children. The laboratory experience will provide opportunities to plan and implement language art and social studies activities. Prerequisite: EDU 103.

EDU 202 Seminar-Co-op in Early Childhood 6 0 10 7

Experience in a variety of child care settings to develop further skill in working with young children, in assisting with programming activities, and in adapting to the needs of individual children. Analysis of individual problems encountered in working with specific age groups.

EDU 203 The Exceptional Child 3 0 0 3

Study of children with developmental variations requiring modification in activities. Consideration is given to recognition of problems, community resources, and appropriate activities for the child with exceptional deviations in personality or physical development. Prerequisite: EDU 201 and SOC 201.

EDU 204 Parent Education 3 0 0 3

Study of ways parents can be involved in the child development center, of the purposes and value of home visitation, and of techniques for reporting child progress to parents. The role of the early childhood specialist in aiding parents in guidance of the child's development is emphasized. Each student will develop a series of programs appropriate for presentation to the parents of preschool children. Prerequisites: SOC 106 and PSY 202

EDU 205 Seminar-Practicum: Special Problems 5 0 10 6

Seminar on child development problems. Continued experience in a variety of child care facilities. Prerequisite: EDU 202.

ELECTRICITY

ELC 101 Fundamentals of Electricity 5 2 6 8

Elementary principles of electricity including basic electric units. Ohm's law, Kirchhoff's law, network theorems, magnetics, basic electrical measuring instruments, inductance, capacitance, sine wave analysis, and nonresonant resistive, inductive and capacitive networks. Prerequisite: None.

ELC 102 Fundamentals of Electricity II 5 2 6 8

Series and parallel resonant-circuits analysis, resonant and non-resonant transformer analysis, basic diode power supply analysis, introduction to non-linear resistive control devices, and introduction to electromechanical devices. Prerequisites: ELC 101, and MAT 101.

ELC 205 Applied Electricity 3 2 0 4

Basic theories of electricity, types of electricity, methods of production, transmission and transforming of electricity. Major topics covered include voltage, amperage, resistance, horsepower, wattage, transformers, DC and AC motors and generators. Prerequisite: PHY 112.

ELC 1110 Applied Electricity I 3 2 0 4

A detailed study of basic DC circuits involving the structure of matter and electron theory as related to common conductors. Investigates the relationship of current, voltage, resistance, and power in the series, parallel and combination circuits. Also study of DC sources and methods of DC generation as well as the electromagnetic effect. Prerequisite: None.

ELC 1111 Applied Electricity II 3 2 0 4

Fundamental concepts of alternating current including a study of capacitive and inductive effects and resulting phase angle. A study of power, current, voltage and impedance in the AC circuit as applied to AC power machinery and control devices relating to heating and refrigeration systems. Prerequisite: None.

ELC 1112 Direct and Alternating Current 5 0 12 9

A study of the electrical structure of matter and electron theory, the relationship between voltage, current, and resistance in series, parallel, and series-parallel circuits. An analysis of direct current circuits by Ohm's Law and Kirchhoff's Law. A study of the sources of direct current voltage potentials. Fundamental concepts of alternating current flow, reactance, impedance, phase angle, power, and resonance. Analysis of alternating current circuits. Prerequisite: None.

ELC 1113 Alternating Current and Direct Current Machines and Controls 5 0 15 10

Provides fundamental concepts in single and polyphase alternating current circuits, voltages, currents, power measurements, transformers, and motors. Instruction in the use of electrical test instruments in circuit analysis. The basic concepts of AC and DC machines and simple system controls. An introduction to the type control used in small appliances such as: thermostats, timers, or sequencing switches. Prerequisites: ELC 1112, MAT 1115.

ELC 1120 Direct and Alternating Current 8 8 6 14

A study of the structure of matter and the electron theory, the relationship between voltage, current and resistance in series, parallel and series-parallel circuits. Analysis of direct current circuits by Ohm's law and Kirchhoff's law; sources of direct current potentials. Fundamental concepts of alternating current flow; a study of reactance, impedance, phase angle, power and resonance and alternating current circuit analysis. Prerequisite: None.

ELC 1124 Residential Wiring 6 0 12 10

Provides instruction and application in the fundamentals of blueprint reading, planning, layout, and installation of wiring in residential applications such as: services, switchboards, lighting, fusing, wire sizes, branch circuits, conduits, National Electrical Code regulations in actual building mock-ups. Prerequisites: ELC 1113, DFT 1110.

ELC 1125 Commercial and Industrial Wiring 6 0 15 11
Layout, planning, and installation of wiring systems in commercial and industrial complexes, with emphasis upon blueprint reading and symbols, the related National Electrical Codes, and the application of the fundamentals to practical experience in wiring, conduit preparation, and installation of simple systems. Prerequisite: ELC 1124.

ELECTRONIC DATA PROCESSING (BUSINESS)

EDP 100 Introduction to Data Processing 3 2 0 4
An introductory course for students in the data processing curriculum. A technical study of the history, terminology, equipment, and concepts of data processing. Laboratory exercises will be used to familiarize the student with data processing equipment and hypothetical programming languages. Prerequisite: None.

EDP 101 Principles of Business Data Processing 3 2 0 4
An introductroy course designed to acquaint the student with the field of data processing. Includes a historical review of data processing, basic terminology, and fundamental concepts of data processing and programming. Laboratory exercises devoted to familiarizing the student with basic data processing equipment. Prerequisite: None.

EDP 102 Logic and Decision Making 2 0 3 3
An introduction to symbolic logic and the application of logic to decision making and programming. Includes simple and compound logic statements, implications and equivalences, and flowcharting techniques. Laboratory exercises involving the development of truth tables and the translation of basic problems into flowcharts. Prerequisite: None.

EDP 105 Assembly Language Programming I 5 2 0 6
An introduction to the study of assembly language programming. Includes Assembly Language specifications, operations, and rules for writing source programs. Laboratory exercises devoted to developing program logic and writing Assembly Language programs to solve sample problems. Prerequisites: EDP 101, EDP 102. Corequisite: MAT 111.

EDP 106 Assembly Language Programming II 2 4 0 4
A continuation of the study of Assembly Language programming. Covers more complex features of the language and more advanced programming techniques. Laboratory assignments devoted to developing program logic and writing Assembly Language programs to solve sample problems. Prerequisite: EDP 105.

EDP 110 COBOL Programming I 3 2 0 4
An introductory course in compiler language programming utilizing COBOL. Includes COBOL concept, components, structure, and basic instructions. Laboratory assignments stressing developing of program logic and writing COBOL programs to solve sample problems. Prerequisites: EDP 101, EDP 102. Prerequisite or Corequisite: MAT 111.

EDP 111 COBOL Programming II 2 4 0 4
A continuation of the study of COBOL. Includes more complex COBOL instructions and techniques. Laboratory exercises involving developing program logic and writing programs to solve simulated industrial and business problems. Prerequisite: EDP 110.

EDP 112 COBOL Programming III 2 4 0 4
A continuation of the study of COBOL emphasizing the more complex features of the language, efficient programming techniques, and debugging techniques. Laboratory

exercises involving developing program logic and writing programs to solve simulated business and industrial problems. Prerequisite: EDP 111.

EDP 120 Introduction of Computer Program 3 2 0 4

A non-technical introduction to the COBOL programming language. Emphasis will be placed on how COBOL is used in business to automate business procedures. Laboratory exercises will be used to develop COBOL programs that can solve business problems. Prerequisite: EDP 101.

EDP 201 Computer Systems 3 2 0 4

A study of computer systems involving such topics as job scheduling, file devices, file organization, operating systems, job control language, and multiprogramming. Prerequisite: EDP 105, EDP 110.

EDP 205 Systems Design and Analysis I 3 2 0 4

The first of two courses designed to give the student training in systems design and analysis. Emphasis in both classroom and laboratory work on problem definition, file organization, effective retrieval and manipulation of information, and systems design techniques. Prerequisite: EDP 111.

EDP 206 Systems Design and Analysis II 3 2 0 4

A continuation of Systems Design and Analysis I. Emphasizes the application of principles studied to data processing systems in the business enterprise. Prerequisite: EDP 205.

EDP 210 Language Survey 2 0 0 2

A survey and comparative study of various computer languages in current use. Stresses the evaluation of languages in terms of utilization in various business applications. Prerequisite: EDP 101.

EDP 220 Research Project 1 8 0 5

Individual assignments of a carefully selected project. Designed to give the student an opportunity to initiate and carry out a project. Places the responsibility upon the student to solve a significant problem with a minimum of assistance from the instructors. Prerequisite: EDP 206.

EDP 230 Introduction to FORTRAN 3 2 0 4

An introduction to FORTRAN, a problem-oriented language. Laboratory exercises devoted to the developing of program logic and writing programs using FORTRAN. Prerequisites: EDP 101, EDP 102, MAT 112.

EDP 231 Linear Programming 3 2 0 4

Lecture and case problems encompassing the use of mathematical programming with computers to increase industrial efficiency. Basic rules of linear programming and related topics presented with laboratory assignments to implement the theoretical aspects. Prerequisites: EDP 111, EDP 230.

EDP 240 PL/1 Programming I 3 2 0 4

An introduction to PL/1 programming. Includes basic PL/1 concepts, components structure, and instructions. Laboratory assignments devoted to developing program logic and writing programs using PL/1. Prerequisites: EDP 101, EDP 102.

EDP 241 PL/1 Programming II 3 2 0 4

A continuation of the study of PL/1. Includes more complex PL/1 instructions and techniques. Laboratory exercises involving development of program logic and writing of PL/1 programs to solve simulated industrial and business problems. Prerequisite: EDP 240.

EDP 250 RPG Programming 3 2 0 4

An introduction to RPG programming. Laboratory exercises devoted to developing program logic and writing programs in RPG to solve simulated business problems. Prerequisites: EDP 101, EDP 102.

EDP 260 Functional Wiring Principles 3 2 0 4

A course dealing with the utilization of unit record equipment. The fundamentals of wiring necessary to perform basic machine functions of printing, reproducing, comparing, and selection. Laboratory exercises including normal business problems employing unit record equipment. Prerequisite: None.

ELECTRONICS

ELN 105 Control Devices 5 2 6 8

The study of the physical and electrical characteristics of semiconductor devices, including diodes and transistors. Biasing techniques, stability, and basic application to rectification and amplification processes are covered. Prerequisite: ELC 102, and MAT 102.

ELN 205 Semiconductor Applications I 5 2 6 8

A study in depth of the analysis and design of transistor circuits pertaining to audio amplifiers and oscillators. Network theorems and equivalent circuits used extensively. H & T equivalent parameters used in design procedures. Prerequisite: ELN 105, and MAT 103.

ELN 210 Semiconductor Applications II 4 0 6 6

A continuation of ELN 205 which covers the characteristics and basic application of Field Effect transistors. In addition, special circuits which include operational amplifiers, differential amplifiers, constant current, and level shifter leading toward integrated circuits. Prerequisites: ELN 205.

ELN 220 Electronic System Analysis 4 0 6 6

A block diagram course investigating numerous electronic systems. Arranging of modules or blocks of various circuits already studied in various manners to produce complex electronic systems. Explanation of systems and reduction of systems to functions and then to block diagrams. Digital techniques as applied to systems emphasized. Prerequisite: ELN 240.

ELN 224 Pulse Circuits and Wave Shaping 4 0 6 6

Study of wave form analysis, basic networks including integrators and differentiators, multivibrators, blocking oscillators, sawtooth generators, and other nonsinusoidal circuits. Basic applications emphasized. Prerequisites: MAT 103, ELN 205.

ELN 235 Industrial Electronics 3 0 6 5

Broad introduction to the use of industrial electro-mechanical and electronic circuits and mechanisms. Provides a basic understanding of various electrical transducers related to pressure, temperature, light, sound, and humidity; and how they can be applied to their associated circuitry with emphasis on applications. Prerequisite: ELN 205.

ELN 240 Digital Fundamentals 4 0 6 6

An explanation into the basic digital techniques used in electronic equipment. Includes numbering systems, Boolean algebra, logic circuits, arithmetic circuits, counters and read-out devices. Prerequisites: ELN 205, ELN 224.

ELN 245 Electornic Design Project 0 0 6 2

Class time devoted to research and design problems, prototype development, and electronic equipment packaging. Lab time devoted to the design and prototype development of some electronic project elected by the student. Prerequisite: ELN 210.

ELN 1118 Industrial Electronics 3 0 3 4

Basic theory, operating characteristics, and application of vacuum tubes such as: diodes, triodes, tetrodes, pentrodes, and gaseous control tubes. An introduction to amplifiers using triodes, power supplies using diodes, and other basic applications. Prerequisite: None.

ELN 1119 Industrial Electronics 3 0 3 4

Basic industrial electronic systems such as: motor controls, alarm systems, heating systems and controls, magnetic amplifier controls, welding control systems using thyratron tubes, and other basic type of systems commonly found in most industries. Prerequisite: ELN 1118.

ELN 1121 Vacuum Tubes and Circuits 4 4 3 7

A course in vacuum tube theory. Areas covered in lecture and laboratory: construction and operation of diodes, triodes, tetrodes, pentodes, and other tube types. Anaylsis of basic circuits such as amplifiers, power supplies, and oscillators. Study of the superheterodyne receiver with an introduction to basic vacuum tube troubleshooting procedures. Prerequisite: ELC 1120.

ELN 1122 Trasistor Theory and Circuits 6 4 6 10

A course in semiconductor theory. Devices to be studied: the diode, transistor, FET, Zener diode, SCR, UJT, and integrated circuits. Circuits studied in lecture and laboratory sessions: power supplies, tuned amplifiers, audio amplifiers, oscillators and detectors. An introduction to systems troubleshooting included. Prerequisite: ELC 1120.

ELN 1123 Black and White Television Servicing 10 6 9 16

A study of black and white television receivers. Detailed study of all circuits of the TV receiver in classroom and laboratory sessions. Supervised servicing practice to develop skills in using test equipment to repair and maintain television receivers. Prerequisites: ELN 1121, ELN 1122.

ELN 1124 Color Television Servicing 10 8 9 17

Theory of operation of the television circuits peculiar to color receivers. Includes composite color telecasing signals, color receiver detectors, kinescopes, convergence, and matrix networks. Theory of operations and practical test bench techniques including troubleshooting, alignment, and convergence. Prerequisite: ELN 1123.

ENGLISH

ENG 010 Individualized English Grammar 3 2 0 0

This course is designed to reinforce the skills of those students who are weak in English and are not ready to attempt successfully the material in ENG 101.

ENG 020 Basic Reading Skills and Vocabulary 3 0 0 0

This course is structured to enable the student to develop an awareness of his specific reading needs and the proper steps to take to satisfy these needs. During the course the student will develop an ability to analyze words, to increase his vocabulary, to use a dictionary, and to increase his reading comprehension.

ENG 026 Clerical Communication 5 0 0 0

This course develops skills in techniques for written and oral communication. Written emphasis is on the fundamentals of business letter writing along with a grammar review. Speaking and listening situations include individual and group interaction in making introductions, announcements, interviews, demonstrations, etc.

ENG 100 Oral Communication 3 0 0 3

English 100 is a beginning course stressing the ability to communicate with others and to understand others. The course deals with the basic concepts and principles of oral communications. Emphasis is placed on the speaker's attitude, diction, voice, speaking habits, and the application of these in oral reports, speeches, and discussions. Prerequisite: None.

ENG 101 Introduction to Written Communication 3 0 0 3

This course is an introduction to composition which stresses written communication but includes some work on reading, vocabulary, and speech. Readings on subjects of current interest serve as springboards for compositions and speeches. Related vocabulary and helpful spelling and grammar concepts are also included. Prerequisite: Satisfactory score on English placement test or passing grade in English 010.

ENG 102 Composition *3 0 0 3*

This course is a continuation of ENG 101, including further work in reading, vocabulary, spelling, grammar, and composition. Reading provides vocabulary and spelling words, and subjects for compositions which enable the student to refine his writing. A unit on conference provides further development in oral communication. Prerequisite: ENG 101.

ENG 103 Technical Report Writing *3 0 0 3*

The fundamentals of English are utilized as a background for the orgainization and techniques of modern report writing. Exercises in developing typical reports, using writing techniques and graphic devices, are completed by the student. Practical application includes in the preparation of a technical report, which is related to the student's chosen curriculum. Prerequisite: ENG 102.

ENG 115 Appreciation of Literature *3 0 0 3*

The student will sample the literary genres of prose and poetry drawn from varied cultures and periods. He will analyze different styles and techniques of writing used in some of the masterpieces of literature. Prerequisite: None.

ENG 205 Business Report Writing *3 0 0 3*

The business report is an influential factor in the managerial decision-making process and the writing phases involved in planning, organizing and preparing this report are the major contents of the course. Memoranda, press releases, business articles, minutes, resolutions, agendas, and citations are studied. Prerequisite: ENG 102.

ENG 206 Business Communications *3 0 0 3*

This course develops skills in techniques in writing business communications. Emphasis is placed on writing letters of claim, adjustment, credit, collection, sales, application, and other specific types of business letters. Prerequisite: ENG 102.

ENG 1101 Communications I *3 0 0 3*

A course in communicative skills stressing reading, writing, speaking, and listening. The course includes library research, planning and delivering effective oral presentations, participation in group discussions, and practice in developing listening skills. Prerequisite: None.

ENG 1112 Communications II *3 0 0 3*

A course in communicative skills with emphasis on written communication in business and industry. Included are units on business letters; job employment; and records, forms and reports. Prerequisite: None.

FIRE PROTECTION

FIP 101 Introduction to Fire Protection Hazards *3 0 0 3*

History and development of fire service, safety and security movements. The role of the fire service, protection and safety personnel. Ancillary organizations. Identification of general fire hazards and their causes and the application of fire protection principles to them.

FIP 102 Municipal Fire Protection *3 0 0 3*

Fire department organization, personnel management, and the department's relationship with other city departments. Evaluation of public fire protection, financial factors, records and reports, equipment procurement policies, apparatus, tools, training needs and programs, maintenance needs and facilities, and other equipment necessary for modern fire protection. Prerequisite: FIP 101.

FIP 103 Construction Codes and Material Rating 2 2 0 3

A thorough study of building codes applicable to fire prevention, and principles and practices used in various types of building construction. Fire resistance tests and ratings of building materials. Prerequisite: FIP 101.

FIP 105 Applied Electricity for Fire Protection 3 2 0 4

A thorough study of methods and means of utilizing electricity to provide power. The installation and maintenance of electric circuit and machinery.

FIP 115 Fire Prevention Programs 3 0 0 3

Principles and application of fire prevention related to the community and industrial plants. The development and maintenance of fire prevention programs, educational programs and inspection programs. Specific applications of related disciplines to fire prevention problems. Prerequisite: None.

FIP 120 Municipal Finance 5 0 0 5

Municipal finance based on sound government principles and practice. A study of budget items preparation of budget, justifying budgets, financial statements, cost accounting and record systems, taxation and audits.

FIP 135 Training Programs and Methods of Instruction 3 0 0 3

Purposes of fire service drills and training programs. The development and operation of the departments' training programs. Facilities and equipment necessary for modern training. Selecting and training and the instructional staff. Suitable methods of instruction. Prerequisite: FIP 115.

FIP 201 Fire Detection and Investigation 3 0 0 3

Determination of cause of accidental and incendiary fire, fire losses and loss of records, points or origin, location and preservation of physical evidence, and scientific aid to investigation. Courtroom procedure in presenting evidence. Motives and methods for fire setting and investigative methods are covered.

FIP 208 Municipal Public Relations 3 0 0 3

A general survey of municipal public relations and their effect on the governmental process. Principles of public relations such as planning, staffing, controlling and directing information to the general public is studied. Emphasis is placed upon personal responsibilities, means of communications, policies and organization of an effective public relations program.

FIP 211 Grading of Fire Defenses 3 0 0 3

Insurance grading schedules and their principles of application. Methods of analyzing fire hazards and the effects of fire hazards on fire insurance rates. A study of the National Board Grading Schedule is made in detail with other schedules covered briefly. Prerequisite: Consent of Advisor.

FIP 218 Chemistry of Hazardous Materials 3 2 0 4

Theories of combustion and extinguishment, including the analysis of flammable materials and the nature of extinguishing agents. The properties of matter affecting fire behavior. The application of the laws and principles of chemistry and physics to the use, storage, and disposal of flammable liquids, solids, gases and dusts. Prerequisite: CHM 101.

FIP 220 Fire Fighting Strategy 3 2 0 4

The aspects of tactics and strategy in extinguishing fires. Pre-fire plans, mutual aid problems, techniques of using available equipment and manpower, conflagrations, techniques of predicting fires by fuel analysis. Emphasis will be on developing thinking skill in relation to crises. Prerequisite: FIP 102.

FIP 225 Fire Protection Law 3 0 0 3

A study of law in realtion to fire protection. Torts, Terms and Contracts studied by case method. Liability of fire protection personnel when making inspections, recommendations, fighting fires, and other tasks. Pertinent laws, ordinances and codes and the responsibilities and powers of the individual or organization concerning enforcement. Prerequisite: FIP 102.

FIP 230 Hydraulics and Water Distributive Systems 3 2 0 4

Mechanics of the flow of fluids through fire hose, nozzles, and appliances, pumps, standpipes, watermains, and other devices. Design, testing, and use of nozzles and appliances, pumps, and water distribution systems. Measurement of fluid flow and methods of determining quantities of water available from a distribution system. Practical applications of principles. Prerequisite: MAT 101, PHY 101.

FIP 231 Sprinkler and Standpipe Systems 3 2 0 4

Types of sprinkler and standpipe systems, system devices and their operation, advantages of sprinkler systems, codes governing installation, water supply requirements, testing, inspection, and maintenance. Prerequisite: FIP 230.

FIP 235 Inspection Principles and Practices 3 4 0 5

A study of the fundamentals of fire inspections including standards, techniques of evaluation of hazards as to degree of the hazard and practical recommendation. Reports including maps and sketches of each building inspected. On-the-site inspections of buildings to locate hazards and to recommend safe practices and improvements. Prerequisite: FIP 103, DFT 118.

FIP 245 Automatic Alarm and Extinguishing Systems 3 2 0 4

A study of the types of fixed extinguishing systems, standard and special fire alarm and fire detection systems, their operation, installation requirements, testing inspection and maintenance. Prerequisite: FIP 105.

HEALTH

HEA 001 Introduction to Health Occupations 2 0 0 0

A course designed to acquaint students with the various health occupations. The student will familiarize himself with job criteria, work related responsibilities, and rewards. Realistic goals in health jobs are explored. Prerequisite: None.

HEA 101 Personal Hygiene and Health 2 0 0 2

Study of influences on physical and mental health, individual practices which aid in maintaining good physical and mental health throughout the life span and responsibilities of those working with young children to maintain personal health and to serve as models for health practices. Prerequisite: None.

HEA 107 First Aid Emergencies 2 0 0 2

How to prevent accidents as well as what to do when an accident occurs is covered in this course. Emphasis is placed on preventive measures. Prompt treatment utilizing the proper techniques is also covered in detail so that the student equips himself to make living safer for other individuals. This is a combination of the standard and advanced courses as taught by the American Red Cross. Prerequisite: None.

HEA 116 Fundamentals of Patient Care 2 0 0 2

The student gains knowledge and understanding of some of the basic and special needs of the hospitalized individual. Classroom, along with clinical, experiences teach the student to apply scientific principles as he utilizes his professional skills in meeting a patient's basic and special needs. Prerequisite: None.

HEA 149 General Pharmacology 3 0 0 3

The course will provide the student with a working knowledge of pharmacological effects, side effects, contraindications, and use of drugs. Sterile preparation and the use of pharmacological measuring systems in preparing drugs will also be covered.

HEATING

HET 1101 Heating Systems 6 0 15 11

Oil burner fundamentals. Operation, control and service of oil burner systems. Gas heating devices. Operation, control and service of gas burner systems. Installation and servicing electric heating elements and their controls. Principle of operation of hot water and low pressure systems. Installation and servicing of piping, controls, pumps and coils. Prerequisite: AHR 1105.

HISTORY

HIS 111 American History 3 0 0 3

In this course the student will survey the development of America from its old world background to the present. Emphasis is placed on major economic, political, and social forces which have contributed to building of American culture. Prerequisite: None.

INDUSTRIAL

ISC 201 Industrial Organization and Management 3 0 0 3

Organizational structure for industrial management, operational and financial activities, including accounting, budgeting, banking, credit and industrial risk, forecasting of markets, selection and layout of physical facilities; selection, training and supervision of personnel as found in typical industrial organizations. Prerequisite: None.

ISC 202 Quality Control 3 2 0 4

Principles and techniques of quality control and cost saving. Organization and procedure for efficient quality control. Functions, responsibilities, structures, costs, reports, records, personnel and vendor-customer relationships in quality control. Sampling inspections, process control, and tests for significance. Prerequisite: None.

ISC 203 Motion and Time Study 3 2 0 4

Studies include the following: operations analysis, types of process charts, break-even analysis, micromotion analysis, work measurement techniques, predetermined time systems (MTM) and development of standard data for incentive systems. Prerequisite: None.

ISC 209 Plant Layout 3 2 0 4

A practical study of factory planning with emphasis on the most efficient arrangements of work areas to achieve lower manufacturing costs. Layouts for small and medium-sized plants, layout fundamentals, selection of production equipment and materials handling equipment. Effective management of men, money and materials in a manufacturing operation. Prerequisites: None.

RESPIRATORY THERAPY TECHNOLOGY

INT 105 Respiratory Therapy Theories and Principles I 4 2 0 5

This course will provide the student with the theories and principles of the function, repair and maintenance of oxygen administration and aerosol administration equipment. The academic knowledge needed to understand the equipment and its management shall be learned and use of miscellaneous equipment will be taught. Prerequisite: None.

INT 111 Respiratory Therapy Orientation 0 0 18 6

The student will be provided with an in-depth knowledge of the job description of the various respiratory therapy personnel by following these individuals about the hospital in their daily activities. The student will also be given clinical experience in the use of different medical gases, and the flowmeters and regulators used with them, as well as nebulization therapy and oxygen administration equipment (setting up, administering, maintaining, and cleaning). Prerequisite: None.

INT 139 Cardiopulmonary Anatomy and Physiology 2 0 0 2

This course consists of a concentrated study of the structure of the respiratory system and its physiological relation to the heart and blood vessels. The student shall gain a deeper knowledge and be given a more sophisticated approach to these systems. Prerequisite: BIO 108.

INT 205 Respiratory Therapy Theories and Principles II 2 2 0 3

This course will provide the student with theories and principles of the function of all type ventilators. The academic knowledge needed to understand the equipment and its management shall be learned. Use of accessory equipment used in conjunction with ventilation will be taught. Prerequisite: INT 105.

INT 208 Emergency Medicine and Resuscitation 2 2 0 3

American Red Cross standard and advanced first aid courses and cardiopulmonary resuscitation will be taught by class and lab methods. The role of the respiratory therapist in the emergency room, in community ambulance programs and in disaster control will also be presented. Prerequisite: None.

INT 211 Pediatrics 2 0 0 2

Normal growth and development in the newborn through the pediatric age groups will be covered in depth. Disease processes, primarily pulmonary, involving the pediatric age groups (such as cystic fibrosis and respiratory stress syndrome) will be covered in depth, as will attitudes of the therapist, the patient and the family toward illness in this age group. Prerequisite: INT 215.

INT 215 Respiratory Therapy Theories and Principles III 2 2 0 3

This course is designed to give the student the necessary information and mechanical skills to disassemble, repair, modify and reassemble the various types of IPPB equipment and mechanical ventilators. Basically a lab course where by the student learns the principle, function and construction by physically disassembling the equipment from top to bottom. Prerequisite: INT 205.

INT 218 Practicum I 0 0 18 6

This course is designed to aid the student in gaining supervised experience working with positive pressure in the clinical area. The student will work with all types of patients requiring IPPB and aerosal therapy. The student will set up, operate and maintain said equipment. Prerequisite: INT 111.

INT 225 Library Research I 2 0 0 2

This course is designed to introduce the student to the medical library and to begin to give the student experienced reference searching. The student will be expected, after researching the references provided, to prepare a paper with bibliography, to present the paper, and to answer any questions from the class. Prerequisites: ENG 100, ENG 101.

INT 228 Practicum II 0 2 15 6

This course is designed to give the student an opportunity to perform and to demonstrate clinically the knowledge gained in parallel courses. i.e. Chest physiotherapy, emergency medicine and resuscitation, pulmonary function, etc. Prerequisite: INT 218.

INT 233 Chest Physiotherapy 1 2 0 2

With class and laboratory experience, the student will learn methods of breathing exercises and segmental bronchial drainage, both in pediatric and adult patients. At this time, an introduction of x-rays and bronchograms will also be provided. (This is started in the Pulmonary Cardiovascular Pathophysiology of the first quarter of the second year.) Prerequisite: INT 269.

INT 235 Library Research II 1 0 0 1

This course is designed to introduce the student to the medical library and to begin to give the student experience in reference searching. The student will be expected, after researching the references provided, to prepare a paper with bibliography, to present the paper, and to answer any questions from the class. Prerequisite: INT 225.

INT 238 Practicum III 0 0 18 6

This course is designed to give the student an opportunity to demonstrate and apply knowledge gained in parallel courses, i.e. respiratory therapy department operation, pediatrics, administration of inhalation therapy medicine, assisted and controlled ventilation, etc. Prerequisite: INT 228.

INT 241 Respiratory Therapy Departmental Operations 2 0 0 2

The organization, development and operation of an respiratory therapy department to be taught in-depth by lecture techniques. Record keeping, charting, personnel management will be covered. Prerequisite: None.

INT 248 Practicum IV 0 0 36 12

This course is designed to give the student an opportunity to perform and demonstrate knowledge gained in parallel courses. The majority of time will be spent administering therapy to the chronically ill and those patients which require long term ventilation and intensive respiratory care. Prerequisite: INT 238.

INT 250 Intensive Respiratory Care 3 0 0 3

An in-depth lecture series involving controlled ventilation of respiratory distress victims using both positive pressure and volume ventilators will be covered. Emphasis will be placed on flow sheets and monitoring techniques provided on a moment to moment and hourly basis. An introduction to arterial blood tap techniques will be provided. Knowledge of edotracheal and tracheotomy airway care for these patients will be stressed. Prerequisite: INT 205.

INT 263 Advanced Respiratory Therapy Techniques and Theories 2 2 0 3

Through lecture techniques, the student will be presented information on heart-lung pumps, membrane oxygenators, hyperbaric oxygenation, and other experimental developments. Prerequisite: INT 215.

INT 268 Pulmonary Function 3 0 0 3

The course will cover normal and abnormal pulmonary functions as well as acid-base physiology in health and disease processes. The student will learn how to perform pulmonary function studies, blood gas analysis, and expired and inspired gas analysis. He will learn the function and maintenance of pulmonary function and blood gas analysis equipment. Prerequisite: INT 205.

INT 269 Pulmonary and Cardiovascular Pathophysiology and Pulmonary Mechanics 4 0 0 4

This course will cover the pathophysiology of disease entities that primarily involve the pulmonary system and all of the cardiovascular system. The etiology, pathophysiology, abnormal pulmonary mechanics, and a brief description of the treatment of each disease process will be covered. Prerequisites: BIO 108, and INT 139.

INT 287 Respiratory Therapy Pharmacology 1 0 0 1

This course, through lectures and laboratory experience, will provide the student with a working knowledge of pharmacological effects, side effects, contraindications, and use of inhalation therapy drugs and autonomic nervous system drugs. The student will receive supervised lab experience in sterile prepration and use of pharmacological measuring systems in preparing the drugs. Prerequisite: HEA 149.

INT 294 Advanced Respiratory Care 2 0 0 2

Continuation of advanced Respiratory Care. Time of review and explanation of techniques, patient care, and case examples will be taught in great detail. Prerequisite: INT 263.

MACHINE AND MECHANICAL

MEC 001 Introduction to Engineering Technology 2 0 0 0

A course designed to expose the student to the fields of engineering and the various functions that exist, i.e. research, development, design, production, construction and sales and to give him exposure to his professional environment. The role of the engineering technician is identified and future employment possibilities are investigated. Prerequisite: None.

MEC 101 Machine Process I 1 0 6 3

An introductory course designed to acquaint the student with basic hand tools, safety procedures and machine processes in our modern industry. Will include a study of measuring instruments, characteristics of metals and cutting tools. Will familiarize student with the lathe family of machine tools by performing selected operations such as turning, facing, threading, drilling, boring, and reaming. Prerequisite: None.

MEC 102 Machine Processes II 1 0 6 3

Advanced operations on lathe, drilling, boring, and reaming machines. Study of milling machines and cutters, shapers and slotter, planers, grinding and finishing machines. Prerequisite: MEC 101.

MEC 104 Applied Mechanics 5 0 0 5

Concepts and principles of statics. Parallel, concurrent and non-concurrent force systems in coplanar and noncoplanar situations. Concepts of centroids and center of gravity, moments of inertia. Prerequisites: MAT 103, PHY 111.

MEC 192 Orientation to Manufacturing Engineering Technology 1 0 0 1

Designed to acquaint the students with the field and with future employment opportunities. The role of the manufacturing engineering technician identified. Prerequisite: None.

MEC 201 Manufacturing Processes I 1 0 6 3

Includes gear design and the processes of gear manufacturing. Includes study and use of numerical control machining with manual programming. Study of punching and forming, chipless machining, and casting, basic materials and semi-conductor work. Prerequisite: MEC 102.

MEC 202 Manufacturing Processes II 2 0 6 4

Emphasizes newer concepts of work handling and automatic machining processes. Concentrated study of production methods in manufacturing. Prerequisite: MEC 201.

MEC 203 Welding Processes 2 0 3 3

A basic study of all popular welding processes. Includes basic gas welding, basic arc, M.I.G., T.I.G., automatic flame cutting and process, application. Operation of each process to a limited extent required. Prerequisite: None.

MEC 205 Strength of Materials 3 2 0 4

Study of principles and analysis of stresses which occur within machine and structure elements subjected to various types of loads such as static, impact, varying and dynamic. Analyses of these stresses made as applied to thinwalled cylinders and spheres, riveted and welded joints, beams, columns and machine components. Prerequisites: MEC 104.

MEC 210 Ferrous Metallurgy 3 0 3 4

Introductory course in metallurgy, basic study of the properties of metals and alloys. Analysis of the structure of metals and alloys, atomic structure, nuclear structure, and nuclear reactions. Solid (crystalline) structures, methods of designating crystal planes, liquid and vapor phase, phase diagrams, and alloy systems. Prerequisite: PHY 112.

MEC 211 Non-Ferrous Metallurgy and Heat Treatment 3 0 3 4

A study including the properties of metals and alloys, the reactions of metals, diffusion, carburizing, metal bonding and homogenization, recrystallization and gain growth, age hardening, nitriding, internal oxidation, heat treatment of steel, laboratory experiments and demonstrations. Prerequisite: MEC 210.

MEC 230 Plant Services 3 2 0 4

The major areas covered include air conditioning theory and design, air compresors, boilers and steam piping systems, water treatment, waste treatment and pollution control, and analysis of fuel systems. Prerequisite: None.

MEC 235 Fluid Power 3 0 3 4

The basic theories of hydraulic and pneumatic systems. Combinations of systems in various circuits. Basic designs and functions of circuits and motors, controls, electrohydraulic servomechanisms, plumbing, filtration, accumulators and reservoirs. Prerequisite: PHY 111, MAT 103.

MEC 237 Control Systems 3 2 0 4

Basic principles of electrical and electronic control systems as related to industrial application. Basic design and functions of circuits, motors, transducers, and servomechanisms. Review of the National Electrical Code. Prerequisites: ELC 205.

MEC 1101 Machine Shop Theory and Practice I 3 0 12 7

An introduction to the machinist trade and the potential it holds for craftsmen. Deals primarily with the identification, care and use of basic hand tools and precision measuring instruments. Elementary layout procedures and processes of lathe, drill press, grinding (off-hand) and milling machines introduced both in theory and practice. Prerequisite: None.

MEC 1102 Machine Shop Theory and Practice 3 0 12 7

Advanced operations in layout tools and procedures, power sawing, drill press, surface grinder, milling machine shaper. Will be introduced to the basic operations of the cylindrical grinder and select projects encompassing all the operations, tools and procedures thus far used and those to be stressed throughout the course. Prerequisite: None.

MEC 1103 Machine Shop Theory and Practice 4 0 12 8

Advanced work on the engine lathe, turning, boring and threading machines, grinders, milling machine and shaper. Introduction to basic indexing and terminology with additional processes on calculating, cutting and measuring of spur, helical, and worm gears and wheels. Use of precision tools and measuring instruments such as vernier height gages, protractors, comparators, etc. Basic exercises given on the turret lathe and on the tool and cutter grinder. Prerequisite: None.

MEC 1104 Machine Shop Theory and Practice 4 0 15 9

Development of class projects using previously learned procedures in planning, blueprint reading, machine operations, final assembly and inspection. Additional processes on the turret lathe, tool and cutting grinder, cylindrical and surface grinder, advanced milling machine operations, etc. Special procedures and operations, processes and equipment, observing safety procedures faithfully and establishing of good work habits and attitudes acceptable to the industry. Prerequisite: None.

MEC 1112 Machine Shop Processes *1 0 3 2*

To acquaint the student with the procedures of layout work and the correct use of hand and machine tools. Experiences in the basic fundamentals of drill press and lathe operations; hand grinding of drill bits and lathe tools; set-up work applied to the trade. Prerequisite: None.

MEC 1113 Shop Processes *2 0 3 3*

Study of practices used in metalworking shops; introduction to how materials can be utilized, and to the processes of shaping, forming and fabricating of metals. Demonstration of the metalworking lathes, grinders, drills, milling machines, shapers, planers, saws, broachers, gear cutting machines and finishing machines. A study of the capabilities of these machines. Prerequisite: None.

MEC 1114 Shop Processes *2 0 3 3*

Comparison of the unit-production and mass-production systems. Casting, forging and allied processes, welding and sheet metal working processes demonstrated and discussed. Mass-production methods studied in relationship to precision dimensional control. Prerequisite: None.

MEC 1115 Treatment of Ferrous Metals *2 0 3 3*

Investigates the properties of ferrous metals and tests to determine their uses. Will include some chemical metallurgy to provide a background for the understanding of the physical changes and causes of these changes in metals. Topics for study: physical metallurgy of ferrous metals, producing iron and steel, theory of alloys, shaping and forming, heat treatments for steel, surface treatments, alloy of special steel, classification of steels, and cast iron. Prerequisite: None.

MEC 1116 Treatment of Non-Ferrous Metals *2 0 3 3*

Continuation of the study of physical metallurgy. Study of the non-ferrous metals: bearing metals (brass, bronze, lead), light metals (aluminum and magnesium), and copper and its alloys. Powder metallurgy, titanium, zirconium, indium and vanadium included in this course. Prerequisite: None.

MEC 1120 Machine Processes *1 0 6 3*

Study of practices used in metalworking shops: introduction to how materials can be utilized. Demonstration of the metalworking lathes, drills, milling machines, shapers, and a study of the capabilities of these machines. Prerequisite: None.

MATHEMATICS

MAT 001 Structure of Arithmetic *5 0 0 0*

This course is designed to help the student gain and improve his computational skills. Instruction is in the basic operations of arithmetic to include addition, subtraction, multiplication, division, fractions, decimals, and percentage.

MAT 002 Pre-Business Mathematics *5 0 0 0*

This course is a review and reinforcement of the basic mathematical skills used in business mathematics.

MAT 003 Algebra *5 0 0 0*

A course designed to provide the student with the basic understandings and manipulative skills of elementary algebra.

MAT 004 Pre-Technical Mathematics *5 0 0 0*

This course is designed for those students who have had some previous instruction in algebra and geometry. Basic concepts of algebra and geometry are reviewed. It includes the properties of the real number system, equations, functions, variables and exponents.

MAT 005 Geometry *5 0 0 0*

A course designed to provide the student with the basic understandings and manipulative skills of elementary geometry.

MAT 020 Mathematics for Health Education *3 0 0 0*

This course is designed to help the student gain and improve his computational skills. Instruction is in the basic operations of arithmetic to include addition, subtraction, multiplication, division, fractions, decimals, and percentages. It will also include simple algebraic equations, powers of 10, metric units, and the apothecary system.

MAT 100 Mathematics for Nursing Education *3 0 0 3*

A course in mathematics designed for students who are preparing themselves for a career in nursing. Topics covered are: whole numbers, common fractions, decimal fractions, percents, ratio and proportion, metric and apothecary systems of measurements, and mathematics of drugs and solutions. Prerequisite: None.

MAT 101 Technical Mathematics I *5 0 0 5*

A course in mathematics designed to support all technology courses. In scope, the course consists of a short review of the basic fundamentals of algebra; the use of the standard (log log) engineer's slide rule; functions and graphs; trigonometic functions; linear equations and determinants; factoring and fractions; solution of quadratic equations; trigonometric functions of any angle or number; exponents and radicals; and the j-operators. Prerequisite: Satisfactory score on mathematics placement test or passing grade in Pre-Technical Mathematics.

MAT 102 Technical Mathematics II *5 0 0 5*

A course in mathematics designed to support all technology courses. In scope, the course consists of vectors and oblique triangles, graphs of trigonometric functions, logarithms, solutions of algebraic and trigonometric equations, inequalities, progressions and advanced topics in trigonometry. Prerequisite: MAT 101.

MAT 103 Technical Mathematics III *5 0 0 5*

A course in mathematics designed to support the technology course. The student is introduced to the fundamental concepts of analytic geometry, differential and integral calculus. In scope, the course covers the straight line, limits, the geometric and algebraic interpretation of the derivation, applications of the derivate, tangents and normals, curvilinear motion, related rates, curve sketching, maximum and minimum, integration and applications (area and volume). Prerequisite: MAT 102.

MAT 111 EDP Mathematics I *5 0 0 5*

A course of study in basic mathematical concepts which includes numbering systems and basic modern mathematics. All topics stressed within the framework of application to data processing. Prerequisite: None.

MAT 112 EDP Mathematics II *5 0 0 5*

A continuation of EDP Mathematics I. Includes equations, linear and nonlinear functions, simultaneous equations, and matrices. Stresses practical application of data processing problems. Prerequisite: MAT 111.

MAT 113 Allied Health Mathematics I *3 0 0 3*

The first of a series of two courses designed to develop and maintain a high level of proficiency in basic mathematical skills and units of measurement and to apply this knowledge to problems dealing with patient care. Topics covered are: fundamental facts about whole numbers, fractions; percents, slide rule; expended notation; positive and negative numbers; functions and graphs; trigonometric functions; and linear equations. Prerequisite: None.

MAT 114 Allied Health Mathematics II 3 0 0 3

The second of a series of two courses designed to develop and maintain a high level of proficiency in basic mathematical skills. Topics covered are: quadratic equations; exponents and radicals; logarithms; ratio and proportion; metric and apothecaries' system of measurement; and mathematics of drugs and solution. Prerequisite: MAT 113.

MAT 115 Fundamental Concepts of Mathematics 3 0 0 3

A general review of fundamental mathematics with special emphasis on applications peculiar to the field of law enforcement. Topics studied are: formulas, ratio and proportion, percentage, right angle trigonometry, graphing, metric units. Prerequisite: None.

MAT 116 Fundamental Concepts of Statistics 5 0 0 5

A course in statistics designed to support all technology courses. In scope, the course consists of frequency distribution, graphic representation, percentiles, measures of central tendency, valiability, the normal distribution culer, sampling error, significance of differences between means, collelation, statistics and the design of experiment, and chi-square.

MAT 160 Engineering Computations 1 0 3 2

A practical course in using calculation devices. Included: slide rule review, use of a programmable electronic calculator, and an introduction to computers. Emphasis is on programming as a mathematical tool. Prerequisite: MAT 102.

MAT 201 Technical Mathematics IV 5 0 0 5

A course in mathematics designed to support the Electronics Technology course at Forsyth Technical Institute. In scope, the course is a continuation and extension of this school's MAT 103. More advanced concepts of differentation and integration are covered; additional applications of these concepts and techniques; the maclaurin series; certain operation with series and computations by use of series expansions.

MAT 208 Calculus for Electronics 5 0 0 5

Derivation of mathematical equations applied to Electronics. Average, RMS, harmonic content of sinusodial and complex waveforms; transfer functions as applied to coupling networks, filters, and attenuators. Prerequisite: MAT 201.

MAT 1101 Fundamentals of Mathematics 5 0 0 5

Practical number theory, analysis of basic operations: addition, subtraction, multiplication and division. Fractions, decimals, powers and roots, percentages, ratio and proportion. Plane and solid geometric figures used in industry; measurement of surfaces and volumes. Prerequisite: None.

MAT 1102 Algebra 5 0 0 5

Basic concepts and operations of algebra: historical background of our base — 10 number system; algebraic operations: addition, subtraction, multiplication and division; fractions, letter representation, grouping, factoring, ratio and proportions, variations, graphical and algebraic solution of first degree equations; solution of simultaneous equations by: addition and subtraction, substitution, graphing, exponents, logarithms, tables and interpolation. Prerequisite: None.

MAT 1103 Geometry 3 0 0 3

Fundamental properties and definitions; plane and solid geometric figures, selected general theorems, geometry construction of lines, angles and plane figures. Areas of plane figures, volume of solids. Geometric principles applied to shop operations. Prerequisite: None.

MAT 1104 Trigonometry 3 0 0 3

Trigonometric ratios, solving problems with right triangles, using tables and interpolating; solution of oblique triangles using law of sines and law of cosines; graphs of the trigonometric functions; inverse functions, trigonometric equations. All topics applied to practical problems. Prerequisite: MAT 1102.

MAT 1113 Carpenter's Mathematics and Estimating 5 0 0 5
Practical problems which the carpenter must frequently solve. Emphasis upon any weaknesses in the basic mathematical operations with instruction and practice of the needed operation. Problems involving common fractions, decimals, power and roots, percentages, and ratio and proportion.

MAT 1114 Carpenter's Mathematics and Estimating 3 0 0 3
A continuation of MAT 1113 including problems dealing with plane and solid geometric figures and the measurement of surfaces and volumes. An introduction to algebra used in the trade. Basic estimating practices for building materials. Prerequisite: MAT 1113 or equivalent.

MAT 1115 Elements of Mathematics 5 0 0 5
A course designed for the radio-TV program to include: review of arithmetic, powers of ten, elementary algebra, trigonometry, vectors, and logarithms. Prerequisite: None.

MAT 1116 Electrical Mathematics 5 0 0 5
A study of fundamental concepts of algebra; basic operations of addition, subtraction, multiplication, and division; solution of first order equations, use of letters and signs, grouping, factoring, exponents, ratios, and proporations; solution of equations, algebraically; a study of logarithms and use of tables; and introduction to trigonometric functions and their application to right angles; and a study of vectors for use in alternating current. Prerequisite: None.

MAT 1117 Plumber's Arithmetic 4 0 0 4
Composed primarily of practical problems which the plumber must frequently solve. Emphasis upon instruction and practice in areas of deficiency in basic mathematics. Use of problems involving common fractions, decimals and percentages. Prerequisite: None.

MAT 1150 Printer's Mathematics 5 0 0 5
This course deals with the printer's point system as it applies to type spaces, furniture, and other spacing materials as well as problems in spacing out lines and centering heads. Instruction and practice will be given in reading a micrometer. Problems in cutting paper economically and in figuring the amount, also problems dealing with measuring the thickness of papers and offset plates. Prerequisite: None.

NUCLEAR MEDICINE TECHNOLOGY

NMT 101 Nuclear Medicine Technology I 1 0 0 1
The student is given an orientation to the field of nuclear medicine technology. The student gains knowledge in elementary patient care procedures and professional ethics. Prerequisite: None.

NMT 102 Nuclear Medicine Technology II 1 0 0 1
The student is introduced to the radiopharmaceuticals and instruments used in nuclear medicine. Radiation safety procedures will also be discussed. Prerequisite: NMT 101

NMT 103 Nuclear Medicine Technology III 1 0 0 1
The student will be introduced to the *in vivo* nuclear medicine procedures. Patient preparation for these procedures will be discussed. Prerequisite: 102.

NMT 104 Nuclear Medicine Technology IV 2 0 0 2
This course is a continuation of the nuclear medicine technology series. The content covered this quarter concerns *in vitro* procedures. Prerequisite: 103.

NMT 111 Principles of Nuclear Medicine I 2 0 9 5
This is an introductory course in clinical nuclear medicine. All major clinical nuclear medicine procedures will be introduced. Prerequisite: None.

NMT 116 Nuclear Physics 2 0 0 2

Nuclear decay schemes and more complicated concepts of radioactive decay are discussed. Interactions of radiation with matter and the calculation and measurement of radiation doses are included. Prerequisites: PHY 102.

NMT 117 Health Physics 1 0 0 1

Protective regulations, monitoring methods, and techniques for reducing exposure of patients and technologists, as well as Atomic Energy Commission and state requirements, will be studied. Prerequisite: None.

NMT 125 Film Processing 2 2 0 3

The student shall be taught how to process exposed radiographic plates. He must be able to demonstrate a proficiency for distinctly readable final product. Prerequisite: None.

NMT 221 Principles of Nuclear Medicine II 2 0 0 2

This course will cover in detail the clinical procedure in Nuclear Medicine pertaining to the thyroid, parathyroid and gastrointestinal tract. Prerequisite: NMT 111.

NMT 223 Radiopharmaceuticals 2 0 0 2

Students will receive classroom instruction related to radiopharmacy functions, production of radionuclides and radiopharmacy mathematics. Prerequisite: None.

NMT 230 Nuclear Medicine Instrumentation 3 2 0 4

The basic theory concerning interaction of radiation in gases, liquids, and solids, and the application of this and radiation detectors (ion counters, G.M. Counters, scintillation counters) are presented. Emphasis is placed upon solid scintillation detectors, amplifiers, spectrometers, ratemeter and scalers. Prerequisite: NMT 116.

NMT 231 Principles of Nuclear Medicine III 2 0 0 2

This course pertains to the cardiovascular central nervous system and pulmonary system. Prerequisite: NMT 221.

NMT 233 Radiopharmaceuticals 2 0 0 2

Students will receive instructions related to preparation and quality control of radiopharmaceuticals, radiopharmacology and radiopharmacy health physics. Prerequisite: NMT 223.

NMT 240 Nuclear Medicine Instrumentation II 3 2 0 4

Students will study in detail the design and use of specific instruments utilized in clinical nuclear medicine. Prerequisite: NMT 230.

NMT 241 Principles of Nuclear Medicine IV 2 0 0 2

This course pertains to the genitro-urinary system, placenta, osseus system, and hematopoetic system. Prerequisite: NMT 231.

NMT 256 Introduction to Radioimmunoassay 1 2 0 2

A review of the basic units of measurement with emphasis on the metric system. The organization of living matter from the chemical view is discussed. Emphasis will be placed on protein structure and competitive protein binding analysis. Prerequisite: CHM 103.

NMT 268 Open Lab Practicum I 0 0 6 2

Clinical experience in NMT 269 as conducted under evening and weekend emergency conditions. Prerequisite: None.

NMT 269 Practicum I 0 0 30 10

To be divided into (3) parts.

1. In a clinical area the student is exposed to and participates in a variety of Nuclear Medicine procedures.

2. Basic instrumentation will be supervised experiments on equipment located in the Nuclear Medicine Department.
3. Participation in the procurement production and handling of radiopharmaceuticals.

Prerequisite: None.

NMT 273 Open Lab Practicum II *0 0 6 2*

Clinical experience in NMT 274 as conducted under evening and weekend emergency conditions with more emphasis on student participation in the clinical procedures and patient contact. Prerequisite: NMT 268.

NMT 274 Practicum II *0 0 30 10*

Students will be exposed to the more advanced applications in Nuclear Medicine procedures. Radiopharmaceuticals and instrumentation. With supervised participation the student performs assigned task in the clinical area. Prerequisite: NMT 269.

NMT 278 Open Lab Practicum III *0 0 6 2*

Clinical experience in NMT 274 as conducted under evening and weekend emergency conditions with more emphasis on student participation in clinical procedures and patient contact. Prerequisite: NMT 273.

NMT 279 Practicum III *0 0 36 12*

Students will develop the knowledge in clinical application of clinical compounds, a better understanding of radiation effects, radiation exposure and biological effects. Prerequisite: NMT 274.

NMT 283 Open Lab Practicum IV *0 0 6 2*

Clinical experience in NMT 278 as conducted under evening and weekend emergency conditions with more emphasis on student participation in clinical procedures and patient contact. Prerequisite: NMT 278.

NMT 284 Practicum IV *0 0 39 13*

A more detailed study in the design and use of specific instruments utilized in clinical nuclear medicine, performs more advanced studies in in-vitro procedures employing radioisotopes and practical therapeutic use of radionuclides. Prerequisite: NMT 279.

NMT 289 Radiobiology *2 0 0 2*

This is a course in which the fundamentals of radiobiology, a system's sensitivity to radiation (normal and neoplastic), radiation pathology, and the biological effects on radiation are stressed with emphasis placed upon the effects of radiation and the effects of radiation absorption on tissue and tissue recovery rate. Prerequisite: NMT 116.

NMT 290 Nuclear Medicine Technology Seminar *2 0 0 2*

This course gives the student an opportunity to review any aspects of nuclear medicine technology in which he has special interest. Guest speakers will be invited to present papers on special topics. Prerequisites: NMT 279.

NURSING

NUR 101 Nursing I *4 2 9 8*

Provides the students orientation to the field of health and the normal basic needs of man. Explores the events which have influenced the practice of nursing, the role of the nurse, and the way in which a community provides health services. Utilizes knowledge of basic needs in developing beginning skill in meeting the basic needs of man. Prerequisite: None.

NUR 102 Nursing II 4 0 12 8

This course is designed for the student to progress from what is already known to increased knowledge of the need for food and fluids by man. Content will involve scientific principles of food metabolism, function of food elements, factors influencing diet, fluid and intake, and the need for elimination. Laboratory experiences will be provided in the school and a general hospital. Prerequisites: NUR 101, MAT 100, BIO 107.

NUR 103 Nursing III 4 0 12 8

This course will focus on three basic needs of man, the need for oxygen, communication, and self-esteem. Course will include factors basic to maintaining an adequate oxygen-supply to all body cells and identifying signs and symptoms indicating a need for oxygen. It will explore various methods of the administration of oxygen. The focus on needs for communication is person to person, nurse-patient, and involves the beginning use of nursing care plans for communication with the team based on scientific principles. Self-esteem as a need is approached from the normal and is applied by the adaption of nursing intervention to support the component of self esteem, while recognizing own feelings that are influencing the perspectives. Course will include use of conferences in school and a general hospital with laboratory practice. Prerequisites: BIO 108, NUR 102.

NUR 104 Nursing IV 4 0 12 8

This course is designed for the purpose of the student to increase concentration on the basic needs of man. Utilizing the basis of known normal needs, the alteration of needs as are inherent in physical or emotional health problems will be considered in developing nursing care. The health problems in this country will be scrutinized from the standpoint of physical-mental illnesses. Specific psychiatric nursing is integrated as a health problem with those of medical-surgical origin through use of psychodynamic process and attention to emotional disorders, treatment, and nursing care.Laboratory: General hospital, special hospitals, clinics and other community health agencies.
Prerequisites: NUR 103, BIO lll.

NUR 105 Human Development 3 0 0 3

This is a foundation course in the principles of development as related to the life span from conception through old age. Emphasis is placed on Eric Erickson's eight stages of development and Havinghurst's developmental tasks. Critical periods in the development of the individual will be identified and their implications explored. Prerequisite: None.

NUR 201 Nursing V 6 0 15 11

The purpose of this course is to study the total maternity cycle with emphasis on family-centered care. Theory of pregnancy, childbirth, child-family relationships, normal and abnormal. The student will have interaction with the well child in the home, child care centers, and public or private schools. Care for the sick child will be learned in clinics, hospitals, and doctors offices. Planning for and meeting the health needs of parents and children will be the center of attention throughout the course. Prerequisites: NUR 104.

NUR 202 Nursing VI 5 0 18 11

This course is designed to study the nursing needs of the person having physical-mental problems of an intermediate nature, and will increase skills in working with the total health team in providing care. Provision will be made where possible for follow-through care where referrals to the Public Health Nursing Bureau or clinics have been made. Prerequisite: NUR 104.

NUR 203 Nursing VII 4 0 24 12

This course provides opportunities to provide total care for patients with acute and serious physical-mental health problems of the major list in the United States. Concentration on patients requiring advanced skills in the assessment, planning, and administration of care to reverse serious alteration of basic needs, will prevail throughout the course. Experiences will be selected from the areas of medical-surgical and psychiatric nursing. Laboratories, hospitals, and other agencies in the community will be used. Prerequisites: NUR 201, NUR 202.

NUR 204 Nursing Trends Seminar 2 0 0 2

This course is designed to involve the student in the exploration of nursing in present day society. Current issues in nursing and nursing education will be explored as they relate to the role and responsibilities of the nurse for providing health care to the public. The activities for securing license to practice, participation in professional organizations, continuing education, and community action are introduced. Prerequisite: None.

NUTRITION

NUT 102 Nutrition for Young Children 2 0 3 3

Study of basic nutrition, with emphasis on (1) methods of helping young children and their families learn nutritional concepts and (2) planning balanced diets for preschool children. Prerequisite: None.

PHILOSOPHY

PHI 101 Introduction to Philosophy 3 0 0 3

An introductory survey of the field, designed to make the student familiar with the main streams of philosophical thought from ancient to modern times. Students will be given opportunity to examine major concepts and apply them to their own value systems. Prerequisite: None.

PHYSICS

PHY 001 Pre-Technical Physics 5 0 0 0

A review of some of the basic concepts of physics. The topics included are systems of measurement, force and motion, and the properties of materials. Emphasis is placed on laboratory procedures and graphical analysis.

PHY 101 Concepts in Physics 3 0 0 3

Nonmathematical introduction to problems and concepts of physics. The major areas covered are mathematics, properties of mathematics, heat, sound, light, electricity and atomic theory. Emphasis will be on the association of physical principles of everyday phenomenon. Prerequisite: None.

PHY 102 Electricity and Electronics 3 0 0 3

A study of electricity and electronics including the concepts of electric and magnetic fields, electric potential, electric circuits and solid state devices. Emphasis is on medical applications of electricity and electronics. Quantitative problems involve the use of elementary algebra and trigonometry. Prerequisite: MAT 113, PHY 101.

PHY 103 Modern Physics 2 0 0 2

A study of the physics developed since 1900. Topics include wave-particle duality, quantum mechanics and nuclear reactions. Quantitative problems involve the use of elementary algebra and trigonomentry. Prerequisite: MAT 113, PHY 101.

PHY 104 Fluid Mechanics 2 0 0 2

A study of the mechanics of fluids and the behavior of gases including the concepts of pressure, temperature, ideal gases, real gases and kinetic theory. Emphasis is on the application of theory to real systems and devices. Quantitative problems involve the use of elementary algebra. Prerequisites: MAT 113, PHY101.

PHY 105 Physics — Introductory 3 0 0 3

This is an introductory physics course intended for those who have not had previous study in the field. Basic concepts in kinematics, heat, light, sound, electricity and atomic physics are stressed. Prerequisite: MAT 113.

PHY 106 Physics — Nuclear and Electronic 3 0 0 3

This course is geared to electronics; it presents a study of basic electronic instruments, their theory of operation, function, tolerances, and calibration. Principles of both service and laboratory instruments will be studied. Also, basic principles of nuclear physics are included. Prerequisites: PHY 105, and MAT 113.

PHY 107 Physics — Gases 2 0 0 2

A working knowledge of the gas laws and their practical application is the gas laws in the objective of this course. Emphasis will be placed both on flow of gases through tubes and orifices and on respiratory care equipment. Prerequisites: PHY 105, MAT 113 and MAT 114.

PHY 111 Physics — Mechanics 3 2 0 4

A fundamental course which develops the concepts of force motion work, energy and power. Also included are the topics of vector analysis, rotational motion and basic machines. Co-requisite MAT 102.

PHY 112 Physics — Materials and Heat 3 2 0 4

A course which examines the properties of solids, liquids at rest and in motion, the gas laws and their application, heat and thermodynamics. Emphasis is on practical application through the use of realistic problems and laboratory exercises. Prerequisite: PHY 111.

PHY 113 Physics — Electricity 3 2 0 4

A study of the basic principles of electricity including electron theory, direct current circuits, alternating current circuits, electro-magnetic interactions and batteries. Emphasis is on practical application through the study of electrical power generating, transmission and conversion devices. Prerequisite: PHY 111.

PHY 114 Physics — Light and Sound 3 2 0 4

A study of wave motion and the generation, transmission and detection of sound and light. Topics include acoustics, illumination, optical devices and lasers. Practical application is emphasized through exercises in acoustical analysis of buildings and lighting system design and layout. Prerequisite: PHY 111.

PHY 216 Radiation Physics 3 0 0 3

The basic principles behind matter, radioactivity, magnetism, electricity, electromagnetism, cords, and circuits as related to x-ray technology. Prerequisite: PHY 106.

PHY 1101 Applied Science I 3 2 0 4

An introduction to some physical principles and their application in industry. Topics included are measurements in the English and metric system; properties of solids, liquids and gases. Practical application is stressed by use of realistic problems and laboratory exercises.

PHY 1102 Applied Science II 3 2 0 4

A study of the concepts of force, motion, work, energy, power and heat. Practical applications are realized through the study of friction and simple machines, and the relationship between thermal and mechanical energy.

PHY 1103 Fundamentals of Electricity 3 2 0 4

Elementary principles of electricity including the structure of matter and electron theory, basic electrical units, the relationship of current, voltage, resistance and power in series, parallel, and combination circuits.

PHY 1104 Applied Science IV 3 2 0 4

A study of wave motion and sound and light. Practical applications are stressed throught the study of acoustics, musical rounds, color mixing, optical devices, illumination and the laser.

PHY 1114 Science for Printers 3 2 0 4

A study of the basic principles of chemistry and physics used in the printing industry.

The topics studied in chemistry include the basic properties of matter, physical and chemical changes, oxidation — reduction, papermaking and photo-chemical reactions. The topics studied in physics include theories of light, reflection, refraction, illumination, color, and camera optics.

PHY 1115 Science for Air Conditioning and Heating 3 2 0 4

This course is designed to cover those physics principles of special significance in air conditioning and heating. Some topics covered are properties of gases, heat transfer, liquid and gas pressures, weights and measures in English and metric units thermodynamic properties of moist air, unique properties of water and water treatment. Prerequisite: None.

PLASTICS

PLA 101 Introduction to Plastics 2 0 3 3

This course provides the student with an overview of the plastics industry. It includes the opportunities to learn the properties of plastics, the range of user application, the jobs done by people in the fabrication of plastics, and the commercial production processes. Some laboratory experience is provided to give a basic understanding of how plastics are fabricated. Prerequisite: None.

PLUMBING

PLU 1112 Plumbing Fixtures and Installation 2 0 3 3

The differences in materials and styles of lavatories, bathtubs, and sinks, and the many ways that these fixtures can be installed form the basis of this course. Includes the proper use of traps. Actual student practice by making installations. Prerequisite: None.

PLU 1116 Plumbing Pipework and Domestic Water Systems 5 0 15 10

Introduces students to the tools, fittings, and small equipment used by plumbers. Performance of operations such as threading, cutting, caulking, and sweating. Use of these procedures as the student learns to plan and install a complete domestic water system including hot and cold water distribution, heating devices, and the storage of hot water, and private and public sewage and drainage systems including their ventilation. Prerequisite: None.

PLU 1120 Maintenance and Trouble Shooting 3 0 18 9

Major emphasis on plumbing maintenance and the problems which the students pursuing the plumber's trade must encounter. Study of regulatory codes, standards and procedures of coal and electrical heating, smoke and nuisance controls and installations. Good practices governing the complex field of space heating with emphasis on furnaces, boilers, heaters, ducts, radiation, safety, and control of air pollution. Course designed to aid in the prevention of fires, explosions, asphyxiations, and wasteful use of materials by employment of good maintenance. Prerequisites: None.

PLU 1122 Low and High Pressure Steam Systems 5 0 12 9

Familiarization with types of low and high pressure steam boilers and the principles of boiler operation. Includes boiler accessories such as connectors, fittings, and insulation; equipment used in heat transmission, such as radiators, coils and connectors. Low pressure steam systems, their layout and component parts studied and installed. Principles involved in industrial applications of both low pressure and high pressure steam equipment. Prerequisites: None.

PLU 1123 Hot Water and Panel Heating 3 0 7 5

Study of the piping and accessory equipment needed to transfer hot water to radiators, heaters and coils, and the advantages and disadvantages of each of these units, including apparatus for radiant heating and panel heating. Methods of "sizing" equipment for various installations. Practical application in installing this equipment. Prerequisite: None.

PLU 1125 Industrial Piping 2 0 6 4

Major emphasis upon piping systems of boilers, turbines, and steam engines especially as they are used in the chemical industry. Prerequisites: None.

PLU 1126 Hydraulic Systems Plumbing 2 0 3 3

Plumbing applications in hydraulic systems. Study of hydraulic principles, circuits, control valves, actuators, pumps, fluids, and various accessoreis that complete hydraulic systems. Installation and servicing methods of the these systems. Prerequisite: None.

PLU 1130 Plumbing Layouts and Codes 4 0 6 6

Sketching diagrams and schematics and interpretation of blueprints applicable to the plumbing trades. Detailed study of piping symbols, schematics, diagrams and notes. Use of applicable building and plumbing codes. Prerequisites: None.

POLICE SCIENCE

PSC 101 Introduction to Law Enforcement 5 0 0 5

A general course designed to familiarize the student with a philosophy and history of law enforcement, including its legal limitations in a democratic republic, a survey of the primary duties and responsibilities of the various law enforcement agencies, a delineation of the basic processes of justice, an evaluation of law enforcement's current position, and an orientation relative to law enforcement as a vocation. Prerequisite: None.

PSC 110 Police Role in Crime and Delinquency 5 0 0 5

The study primarily concerned with scientific efforts to understand crime and to understand man in relation to crime phenomena. It deals with those definitions and formulations of crime and criminals upon which an adaptation system of criminology must be based. It examines the law as the basic framework within which social deviations of a peculiar character assume their functions as criminal acts and those broad principles upon which a science of criminology must rest. Prerequisite: None.

PSC 115 Criminal Law I 5 0 0 5

Designed to present a basic concept of criminal law and to create appreciation of the rules under which one lives in our system of government. Prerequisite: None.

PSC 116 Criminal Law II 5 0 0 5

A continuation of the study of the basic concepts of criminal law and why the law operates in its individual ways, jurisdiction, the criminal act, the mental element, criminal responsibility. The study proceeds to detailed examinations of the numerous specific criminal areas. Prerequisite: Criminal Law I.

PSC 120 Administration of Justice 3 0 0 3

A review of court systems; procedures from incident to final disposition; the six primary functional areas for the administration of justice to include police, prosecutor, criminal courts, probation, institutions, and parole; and principles of federal, state, and civil laws as they apply to and affect law enforcement. Prerequisite: None.

PSC 210 Criminalistics I 3 2 0 4

This course introduces the student to fundamentals of investigation; crime scene search; recording, collection and preservation of evidence; sources of information, interview and interrogation; case preparation and court presentation; and the investigation of specific offenses such as arson, narcotics, sex, larcency burglary, robbery, and homicide. Prerequisite: None.

PSC 211 Criminalistics II *3 2 0 4*
Continuation of the study of criminal investigation including a general survey of the methods and techniques used in modern scientific investigations of crime, with emphasis upon the practical use of these methods by students. Laboratory techniques will be domonstrated and the student will participate in actual use of the scientific equipment. Prerequisite: PSC 210.

PSC 220 Police Organization — Administration *5 0 0 5*
Introduction to principles of organization and administration, discussion of the service functions: e.g., personnel management, police management, training communications, records, property maintenance and miscellaneous services. Prerequisite: None.

POLITICAL SCIENCE

POL 102 Government — National *5 0 0 5*
English and Colonial background, the Articles of Confederation and the framing of the federal Constitution. The nature of the federal union; states' rights, federal powers, political parties. The general organization and functioning of the national government. Prerequisite: None.

POL 103 Government — State and Local *5 0 0 5*
A study of state and local government, state-federal interrelationships, the functions and prerogatives of the branches. Problems of administration, legal procedures, law enforcement, police power, taxation, revenues and appropriations. Special attention will be given to North Carolina. Prerequisite: None.

POL 212 American Government *3 0 0 3*
The student will survey the organization and functions of our national and state government, with special emphasis upon the study of the national Constitution. Prerequisite: None.

PRACTICAL NURSE EDUCATION

PNE 1101 Fundamentals of Practical Nursing *9 2 3 11*
Interpretation of the role of the practical nurse student and basic knowledge to be used in performing nursing. Philosophy and objectives of practical nursing in the technical institute setting. Use of study methods and materials. Principles of interpersonal relationships in nursing. Body mechanics for nurse and patient. Sterilization and disinfection methods. Principles of medical and surgical asepsis. Use of hospital equipment. Techniques for daily hygienic patient care. Spoken and written communications for nurses. Laboratory and clinical practice in nursing hand skills. Prerequisite: None.

PNE 1102 Nutrition and Diet Therapy *3 0 0 3*
Designed to give knowledge of the use of nutrients for nurse and patient. Functions and sources of nutrients. The mechanics of digestion, absorption and metabolism. Principles of meal planning. Nutritional requirements for all age groups modified by religious, cultural, social, and psychological factors. Common therapeutic diets and their effect on disease conditions. Prerequisite: None.

PNE 1103 Anatomy and Physiology *3 0 0 3*
A study of the general plan of the body and nine systems: nervous, endocrine, skeletal, muscular, circulatory, digestive, respiratory, urinary, male and female reproductive systems. Designed for understanding how the human body controls its functions, stands erect and moves, distributes food and oxygen, removes waste and provides for survival. Prerequisite: None.

PNE 1105 Introduction to Drug Administration 3 0 0 3

A study of safe techniques for oral drug administration. Knowledge of drug sources, methods of preparation and storage. Classification of drugs by use and content. Review of adding, subtracting, multiplying fractions and decimals. Systems for measuring drugs. Solving problems of measurement, conversion within systems and from system to system. Legal aspects of medication preparation. Prerequisite: None.

PNE 1106 Medical-Surgical Nursing I 5 0 0 5

An introduction to nursing needs of the adult medical and surgical patient. Uses nursing knowledge gained in all courses in Quarter I. Prepares for nursing care of physical problems caused by illness, body responses to disease and pain, and assisting patients during diagnostic tests. Pre-operative and post-operative care, safety and comfort measures for the aging and meeting needs of patients with a communicable disease. Prerequisites: PNE 1101, 1102, 1103, and 1105.

PNE 1107 Maternity Nursing 3 0 0 3

Presentation of modern aspects of maternity nursing. The nursing care of the normal obstetrical patient and newborn child. Detailed nursing care of patients during antepartum labor and postpartum periods. Emphasis on provision of better and safer nursing care for the expectant mother and her baby. Prerequisites: PNE 1101, 1102, 1103, and 1105.

PNE 1108 Nursing of Children 3 0 0 3

Comparison of normal growth and development patterns of the newborn, school-age child and adolescent. Physical differences in the child and adult. Methods of meeting needs of the hospitalized child and his parents. Nursing care for common home and hospitalized disorders of children. Prerequisites: PNE 1101, 1102, 1103, and 1105.

PNE 1109 Clinical Experience I 0 0 21 7

Eleven weeks' experience with patients of all ages in a general hospital under supervision of clinical teachers. Five weeks of experience with young adults, adults of middle years and the aging. Six weeks of experience with mothers and newborns or with sick children from the age of newborn to the adolescent. Practice of simple hand skills and solving of simple nursing care problems. Beginning experience in making observations, using testing materials and instruments. Experience in planning, meeting and charting some simple needs of hospitalized patients. Opportunities to begin development of attitudes and skills necessary for successful practical nursing career. Prerequisites: PNE 1101, 1102, 1103, and 1105.

PNE 1110 Medical-Surgical Nursing II 5 0 0 5

Principles and concepts of simple and complex rehabilitative nursing. Cancer nursing. Study of the nursing care and socio-psychological implications of common disorders of adults in the following body systems: respiratory, musculoskeletal, gastrointestinal, reproductive and urinary. Prerequisites: PNE 1106, 1109, and all Quarter I Courses.

PNE 1111 Drug Therapy 3 0 0 3

Factual knowledge in dosages and effects of drugs. Practice with equipment and techniques used in preparing and giving injections. Insulin therapy. Dosage problems. Storage and preparation of narcotics. Prerequisites: PNE 1105 and 1109.

PNE 1112 Clinical Experience II 0 0 21 7

Continued experience with adults or experience with children or in the maternity/nursing units. Assignment to patients with nursing needs of the respiratory, musculoskeletal, gastrointestinal, reproductive and urinary systems. Opportunities for planning to meet needs of patients through treatments and oral drug administration. Practice of isolation technique and oxygen therapy. Beginning this quarter each student assigned to two days' experience in operating room and recovery room observation. Prerequisites: All Quarter I and II Courses.

PNE 1113 Medical-Surgical Nursing III 5 0 0 5

Continuation of study of disorders of body systems. Includes nursing care of medical and surgical conditions of the eye, ear, and skin. Nursing care of disease conditions of the circulatory, nervous and endocrine systems. Introduction to social illnesses of alcoholism, mental disturbances, and drug addiction. Continuation of individual observation in operating room and recovery room until every student has had two days of this experience. Prerequisites: All Quarter I, II, and III Courses.

PNE 1114 Clinical Experiences III *0 0 24 8*
Student learns her role as an assistant to the professional nurse in caring for the more seriously ill patient. Continued experience with adult in medical-surgical nursing, pediatric nursing or obstetrical nursing under supervision of clinical teachers. Experience in more complicated nursing treatments. Assignment to patients with conditions of circulatory, nervous and endocrine systems and social illnesses. Continuation of individual observation in the operating/recovery rooms until every student has had two days of this experience. Prerequisites: All Quarter I, II, and III Courses.

PNE 1115 Personal and Vocational Relationships *2 0 0 2*
Advanced practical nursing ethics. Medico-legal aspects of practical nursing. Organizations for the graduate practical nurse. Role of nurses in community and state. Job descriptions. Evaluating, applying, resigning positions. Work resume. Nursing errors and crimes. Continuing education. Preparation for State Board Examinations. North Carolina nursing law. Corequisites: PNE 1113, 1114, and all Quarter I, II, III Courses.

PRINTING

PRN 1101 Printer's English *3 0 0 3*
This is not a course for beginners in English, but it is intended to provide a review of the essentials of English as they relat to the art of printing. The course deals with compounding words, modern punctuation, capitalization, syllabication, contractions, homonyms, errors in English words, sentence structure, and the marks in proofreading. Prerequisite: None.

PRN 1112 Printing Orientation *2 0 6 4*
An introduction to the printing trade. Lectures will cover history of main processes in printing along with study of each process and equipment involved in each. Lab work will consist of producing minor jobs in the area of Letterpress, Offset, and Silkscreen. Prerequisite: None.

PRN 1113 Offset Camera II *3 0 6 5*
A continuation of PRN 1125. This course is an advanced study of the process camera and related darkroom equipment. Duotones, two, three, and four color separations will be emphasized. Prerequisites: PRN 1125.

PRN 1114 Estimating I *5 0 0 5*
Instruction in the fundamentals of estimating the cost of jobs prior to printing. Areas covered will be estimating time, labor, and materials. Emphasis will be on paper — how to figure the number of sheets needed and how to order it from the paper house. Prerequisite: None.

PRN 1124 Offset Stripping and Platemaking *2 0 6 4*
Study of the arranging of negatives and positives in the form of flats from which the offset plates are made. Examination and treatment of negatives to remove defects by opaquing and retouching will be covered. Fundamental principles of platemaking will also be covered. Practical experience in both areas will be received during shop time. Prerequisite: None.

PRN 1125 Offset Camera I *3 0 6 5*
Instruction will include the theory and practice of preparing line and halftone negatives and positive for offset lithography. Camera settings, lens settings, chemical preparation, and film processing will be covered as an integral part of darkroom procedure. Prerequisite: None.

PRN 1126 Offset Presswork I 2 0 6 4

Theory and practice of operating offset printing presses will include experience on the Multilith, A.T.F. Chief, and Itek Offset Presses. Instructions will include inking and water systems, registration, feed and delivery systems, roller and blanket care, and basic trouble shooting. Prerequisite: None.

PRN 1127 Offset Presswork II 3 0 6 5

A continuation of PRN 1126; this course will place emphasis on use and maintenance of the larger press. Students will be introduced to the production of two, three, and four color process printing. Prerequisite: PRN 1126.

PRN 1128 Copy Preparation I 2 0 3 3

Planning, visualizing and designing copy for photographic reproduction. The use of roughs, comprehensives, sketches, mechanicals, pasteups, photostats, mechanical screens, veloxes, photography, reduction, and enlargements of copy, color separation (in-plant and out-of-plant) and imposition. Prerequisite: None.

PRN 1129 Copy Preparation II 3 0 6 5

A continuation of PRN 1128. Course will consist of study of photo-composition and electronic equipment with emphasis on operation and general maintenance. Practical experience will be received in producing small books and newspapers using the phototypesetting equipment. Prerequisite: PRN 1128.

PRN 1130 Layout and Design 2 0 3 3

A study of the elements in layout and design, including the principles of balance, proportion, harmony, contact and color in printed matter. An evaluation of designs used for advertisements, business forms, stationery, sketches, roughs, comprehensives, affinity of type faces, and marking copy in the preparation of dummies in both conventional and modern design. Prerequisite: None.

PRN 1140 Elective 0 0 21 7

The elective subject will be determined after a conference between the instructor and student. The elective will be an area in which the student has had the basic fundamentals of printing. Students may elect to specialize in the area of letterpress or offset printing. Prerequisite: PRN 1127.

PSYCHOLOGY

PSY 101 Psychology 3 0 0 3

This course is geared to study the principles of human behavior with reference to thinking, learning, memory, perception, emotional life, individual differences in intelligence, aptitude, and personality, the scientific nature of psychological investigations and research findings related to daily life. Prerequisite: None.

PSY 102 General Psychology 5 0 0 5

A study of the various fields of psychology: the developmental process, motivation, emotion, frustration and adjustment, mental health, attention and perception, problems of group living. Attention is given to applications of these topics to problems of study, self-understanding and adjustment to the demands of society. Prerequisite: None.

PSY 103 Adolescent Psychology 5 0 0 5

A study of the nature and source of the problems of adolescents in western culture; physical, emotional, social, intellectual, and personality development of adolescents. Prerequisite: PSY 102 or equivalent.

PSY 104 Human Behavior and Learning 3 0 0 3

A study of the principles of behavior and the theories of learning. Emphasis is placed on the developmental aspects and motivation. Prerequisite: PSY 101.

PSY 105 Human Growth and Development: Prenatal and Infant 3 0 0 3

A detailed study of the developmental sequence of the prenatal and infant periods, with emphasis on developmental influences and conditions necessary for optimal and development of individuals. Prerequisite: PSY 104.

PSY 106 Human Growth and Development: Early Childhood 3 0 0 3

A detailed study of the developmental sequence during the preschool period, ages 2 to 6. Emphasis is given to factors influencing development; the importance of experiences in establishing patterns of behavior, attitudes, interpersonal skills; language usage; and the relationship of early childhood to later realization of potential. Prerequisite: PSY 105.

PSY 108 Abnormal Psychology 5 0 0 5

This course offers an introduction to behavior pathology. The etiology, diagnosis, and prognosis of abnormal behavior. Neurosis, psychosis, character disorders, and psychosomatic reactions are among the topics included in the study. Prerequisite: PSY 102 or equivalent.

PSY 112 Personality Development 3 0 0 3

Designed to help the student recognize the importance of the physical, intellectual, social, and emotional dimensions of personality. Emphasizes grooming and method of personality development. Prerequisite: None.

PSY 169 Social Psychology of Health and Illness 4 0 0 4

In studying how culture defines one's responses to illness, both the psychological and sociological factors which play such an eminent part in one's development will be investigated. The cultural principles attributed to illness, symbols of illness, and situations associated with illness not only illustrate how illness affects family patterns and development, but also how such psychological and sociological principles affect patient-professional, family-patient, and family-professional relationships.

PSY 201 Human Growth and Development: Middle Childhood and Adolescence 3 0 0 3

A detailed study of the developmental sequence during middle childhood and adolescence; emphasis is given to environmental and social factors which influence developmental rates, formulation of behavior patterns, and establishment of value systems and interests. Prerequisite: PSY 106.

PSY 202 Human Growth and Development: Adulthood 3 0 0 3

A study of adulthood in terms of developmental tasks, life problems, crises, adjustment mechanisms, and problems related to intellectual, emotional, and social aspects of the individual in relation to others and to society. Prerequisite: PSY 201.

PSY 205 Child Psychology 3 0 0 3

The objective of this course is to consider the significant phases of motor, cognitive, emotional, and social development of the child as these are influenced by genetic, cultural, and individual elements from the prenatal period to adolescence. Prerequisite: PSY 101.

PSY 206 Applied Psychology 3 0 0 3

A study of the principles of psychology that will be of assistance in the understanding of interpersonal relationships on the job. Motivation, feelings and emotions are considered with particular reference to on-the-job problems. Other topics investigated are: employee selection, supervision, job satisfaction, and industrial conflicts. Attention is also given to personal and group dynamics so that the student may learn to apply the principles of mental hygiene to his adjustment problems as a worker and as a member of the general community. Prerequisite: None.

PSY 207 Social Psychology 5 0 0 5

A survey of the basic principles concerned with study of the psychology of man in groups. Emphasis given to behavior in interpersonal relationships: dyadic reciprocity, roles and stereotypes, achievement motive, acquisition of morality, and person perception. Prerequisite: None.

PSY 1101 Human Relations 3 0 0 3

Development of understanding of relationships to other persons through some of the basic principles of human psychology. Study of the problems of the individual and his work situation in relation to society, group membership, and relationships within the work situation. Prerequisite: None.

RADIOLOGIC TECHNOLOGY

RDT 113 Departmental Orientation and Ethics and Elementary Radiation Protection 1 0 3 2

This course is designed to introduce the student to the clinical setting. Emphasis is placed upon the functions of the x-ray department and ethics of the medical profession. The basic concepts of radiation protection of both the student and patient is introduced and practiced in the clinical setting. Prerequisite: None.

RDT 114 Basic Essentials of Radiologic Technology 2 0 6 4

This course consists of two lecture hours and six practicum hours each week. The student is introduced to the basic essentials of Radiologic Technology. Included is a preliminary overview of technical factors, positioning, and radiographic accessories. The student used the practicum hours to fortify these basic essentials of Radiologic Technology. Prerequisite: RDT 113.

RDT 116 Radiographic Terminology 1 0 0 1

Designed to familiarize the student with various words, phrases and abbreviations used primarily in the radiology department. Prerequisite: None.

RDT 125 Radiographic Darkroom 2 0 0 2

Lectures, demonstrations, and experiments designed to instruct in the proper use of various photographic chemicals and techniques producing radiographs of the highest quality. Prerequisite: None.

RDT 137 Radiographic Technique I 3 0 0 3

This course introduces the student to the basic concepts of radiographic production. Prerequisite: None.

RDT 138 Practicum I 0 0 30 10

Practical aspects of basic radiography. Prerequisite: HEA 116.

RDT 139 Positioning and Related Anatomy 3 0 0 3

Radiographic positioning of the upper extremity, shoulder girdle, foot, ankle, and lower leg. Special emphasis is placed upon the osseous radiographic anatomy of the particular structures. Prerequisite: BIO 108.

RDT 161 Open Lab I 0 0 6 2

Clinical experience in RDT 138 as conducted under night and weekend emergency conditions. Prerequisite: None.

RDT 174 Elementary Radiological Protection 0 0 0 0

Non-credit course (4 lecture hours for one week only). The student is taught the basic methods by which he, other personnel, and patients are protected from x-rays within the Radiology Department. Prerequisite: None.

RDT 204 Nuclear Medicine 2 0 0 2

Fundamentals of radioisotope technology. Prerequisite: None.

RDT 220 Operating Room Radiography *1 0 0 1*

This course gives the student an understanding of the various radiographic procedures which may be required during surgery. Each student spends an adequate amount of time in the operating room to observe a wide variety of surgical procedures. Prerequisite: RDT 237.

RDT 233 Seminar I *1 0 0 1*

A comprehensive study of radiology and the student's role in the medical profession as an x-ray technologist. Prerequisite: None.

RDT 234 Seminar II *1 0 0 1*

An opportunity for the student to do extra research and review in any aspect of technology in which he has special interest. Guest speakers will present to the students techniques, routines, and policies as carried forth at their respective hospitals. Prerequisite: RDT 233.

RDT 237 Radiographic Technique II *3 0 0 3*

An indepth study is presented in the selection of exposure factors, and the proper use of grids, cones, and other devices which may be employed to produce high quality radiographs. Prerequisite: RDT 137.

RDT 238 Practicum II *0 0 30 10*

Clinical practice with proficiency in the proper use of radiographic accessories and equipment. Prerequisite: RDT 138.

RDT 248 Practicum III *0 0 30 10*

Clinical instruction with emphasis on efficient operation of radiographic and fluorographic equipment and procedures. Prerequisite: RDT 238.

RDT 249 Radiation Protection *1 0 0 1*

Protective regulations, monitoring methods, and techniques for reading exposure of patients and technologists. Prerequisite: None.

RDT 250 Special Procedures *2 0 0 2*

An in depth study of radiographic procedures employing body section radiography, sterography, kymography, etc. Prerequisite: None.

RDT 252 Special Procedures *2 0 0 2*

A study of all phases of anglography including cerebral, vascular, and cardioanglography. Prerequisite: RDT 250.

RDT 257 Departmental Administration *1 0 0 1*

To acquaint the student with the function, organization, supervision, and financial arrangements in the Radiology Department. Prerequisite: None.

RDT 258 Practicum IV *0 0 30 10*

Emphasis is placed upon the efficient operation of special equipment and procedures as a part of continuing clinical experience. Prerequisite: RDT 248.

RDT 259 Positioning and Related Anatomy *3 0 0 3*

Radiographic positioning of the proximal lower extremity, hip, pelvis, vertebral column, and skull. Prerequisite: RDT 139.

RDT 260 Pediatric Radiography *1 0 0 1*

A study of various positions, technical factors, and special problems associated with theradiography of infants and children. Prerequisite: RDT 137.

RDT 262 Open Lab II *0 0 6 2*

Clinical experience in RDT 238 as conducted under night and weekend emergency conditions. Prerequisite: RDT 161.

RDT 263 Open Lab III 0 0 6 2

Clinical experience in RDT 248 as conducted under night and weekend emergency conditions. Prerequisite: RDT 262.

RDT 264 Open Lab IV 0 0 6 2

Clinical experience in RDT 258 as conducted under night and weekend emergency conditions. Prerequisite: RDT 263.

RDT 265 Open Lab V 0 0 6 2

Clinical experience in RDT 268 as conducted under night and weekend emergency conditions. Prerequisite: RDT 264.

RDT 266 Clinical Internship 0 0 15 2

This course consists of continued study in all aspects of diagnostic radiology. The student performs radiographic examinations mainly under indirect supervision by instructors and staff technologists. The student is evaluated for excellence in examinations and procedures performed. Prerequisite: RDT 268.

RDT 268 Practicum V 0 0 30 10

An advanced clinical participation in radiographic theory, technique, and all categories of radiologic technology. Prerequisite: RDT 258.

RDT 269 Positioning and Related Anatomy 3 0 0 3

This course deals with the radiography of body systems including the gastrointestinal tract, colon, biliary tract, and urinary tract, with special considerations of the related anatomy and physiology as applied in radiography. Prerequisite: RDT 259.

RDT 275 TV and Monitor Systems 1 0 0 1

A study of image intensification, videotape systems, and other recording devices used in the field of radiology. Through this course the student gains a basic understanding for this relatively new development in the advancement of radiographic science. Prerequisite: None.

RDT 276 Equipment Maintenance 1 0 0 1

To familiarize the student with the component circuits of an x-ray unit, to permit detection and proper correction of difficulties which interfere with or prevent the proper function of the equipment or accessories; as well as preventive maintenance to avoid expensive breaddown. Prerequisite: None.

RDT 280 Dental Radiography 1 0 0 1

To familiarize the student with the essential equipment, accessories, and techniques used in dental radiography. Prerequisite: RDT 237.

RDT 281 Radiation Therapy 2 0 0 2

Fundamentals of radiation therapy techniques and their use in the treatment of diseases. Prerequisite: None.

RDT 283 Radiographic Pathology 2 0 0 2

A course provided primarily for the x-ray student relating pathological conditions and their appearance on the radiography. Prerequisite: None.

RDT 289 Film Critique I 1 0 0 1

A review of films obtained by the student with consideration of basic positioning and technique. Prerequisite: None.

RDT 290 Film Critique II 2 0 0 2

Evaluation of diagnostic film quality as related to proper use of radiographic accessoreis. Prerequisite: RDT 289.

RDT 291 Film Critique III 2 0 0 2

Critical analysis of radiographs obtained by the student with emphasis upon special techniques and fluorographic procedures. Prerequisite: RDT 290.

RDT 292 Film Critique IV 2 0 0 2

The student presents films for critical evaluation of advanced radiographic procedures with emphasis upon visual anatomical structures and pathological conditions. Prerequisite: RDT 291.

SCIENCE

SCI 101 General Science 3 0 0 3

A study of the basic concepts from biological, physical and natural sciences.

SOCIOLOGY

SOC 010 Study Skills 2 0 0 0

The objective of this course is to help the student develop the fundamental learning skills necessary for effective scholastic accomplishment at the college level. Major topics covered in the course are scheduling time and working effectively, using textbooks properly, taking and organizing notes, use of the library and its facilities, improving memory and concentration, writing reports and research papers, and effective examination skills.

SOC 100 Sociology I 0 4 0 2

The recognition and development of human potential through emphasis on positive achievements, characteristics and attitudes. Beginning sessions will seek to establish for each student those things about himself that he can like and take pride in. Early in the course students will begin a process of establishing short-term goals. Other positive processes will include an analysis of strengths, identification of personal values, recognition of latent potential and establishment of long-range goals.

SOC 101 Sociology II 0 4 0 2

A continuation of the process begun in 100 with more in depth analysis of individual potential and more emphasis on long-range goal establishment. The student will be encouraged to be aware of his feelings and to utilize them to advantage. Honest self-appraisal, development of self-confidence and positive self-image are primary objectives.

SOC 102 Principles of Sociology 5 0 0 5

An introductory course in the principles of sociology. An attempt to provide an understanding of culture, collective behavior, community life, social institutions, and social change. Presents the scientific study of man's behavior in relation to other men, the general laws affecting the organization of such relationships and the effects of social life on human personality and behavior. Prerequisite: None.

SOC 103 Sociology 3 0 0 3

The student will examine the social environment in which personality matures, and an analysis of the major social institutions as well as the major social process. Attention is given to the scope, methods and concepts of sociology. Prerequisite: None.

SOC 104 The Family: A Cross-Cultural Survey 3 0 0 3

Study of the family as a social unit, with primary focus on the influence of family relationships during infancy and childhood. Historical patterns and the evolution of family roles in various types of cultures provide opportunities to analyze and interpret the influence of the culture and the family in relation to the larger society. Prerequisite: None.

SOC 105 Families in the American Culture 3 0 0 3

Study of the family in the American culture, changing patterns in family roles, the influence of socio-economic status on family relationships, factors associated with cultural deprivation, and the effects on children in such families. Prerequisite: SOC 104.

SOC 106 The Family in the Community 3 0 0 3

Study of community agencies concerned with physical and mental health in families, socio-economic problems, and education of child-rearing. Prerequisite: SOC 105.

SOC 201 The Child and Community Services 3 0 0 3

Study of the type of facilities needed by a community concerned with the well-being of its children. Analysis of child needs which can be met through community planning, with identification of local, state, and national resources. Prerequisite: SOC 106.

SOC 207 Rural Society 3 0 0 3

A study of selected elements of rural sociology with emphasis on current social changes. The course provides a sociological background for the understanding of rural social changes. Areas of study include rural culture, group relationships, social classes, rural suburban communities, farm organizations, the communication of agricultural technology, rural social problems, agricultural adjustment, and population change. Prerequisite: None.

SOC 209 Social Problems 3 0 0 3

An analysis of modern social organization and disorganization as they relate to various social problems in contemporary American society. Prerequisite: SOC 102.

SOC 210 Minorities in American Society 3 0 0 3

A study of the historical and scientific questions of race; a study of sociocultural patterns in various inter-racial areas; and inquiry into the problems of conflict adjustment.

WELDING

WLD 1101 Basic Gas Welding 1 0 3 2

Welding demonstrations by the instructor and practice by students in the welding shop. Safe and correct methods of assembling and operating the welding equipment. Practice given for surface welding; bronze welding; silver-soldering, and flame-cutting methods applicable to mechanical repair work. Prerequiste: None.

WLD 1102 Applied Metal Preparation and Welding 1 0 3 2

Welding practices on material applicable to the installation of body panels and repairs to doors, fenders, hoods, and deck lids. Student runs beads, does butt and fillet welding. Performs tests to detect strength and weaknesses of welded joints. Safety procedures emphasized throughout the course. Prerequisite: None.

WLD 1111 Air Conditioning Welding 1 0 3 2

Welding demonstrations by the instructor and practice by students. Safe and correct methods of assembling and operating the welding equipment. Practice given for surface welding; bronze welding, silver-soldering, and flame-cutting methods applicable to mechanical repair work. Prerequisite: None.

WLD 1113 Mechanical Testing and Inspection 1 0 3 2

The standard methods for mechanical testing of welds. Types of test covered: bend, destructive, free-bend, guided-bend, nick-tear, notched-bend, tee-bend, nondestructive, V-noch, Charpy impact, etc. Prerequisites: None.

WLD 1120 Oxyacetylene Welding and Cutting 4 0 15 9

Introduction to the history of oxyacetylene welding, the principles of welding and cutting, nomenclature of the equipment, assembly of units. Welding procedures such as practice of puddling and carrying the puddle, running flat beads, butt welding in the flat, vertical and overhead positions, brazing, hard and soft soldering. Safety procedures stressed throughout the program of instruction in the use of tools and equipment. Performance of mechanical testing and inspection to determine quality of the welds. Prerequisite: None.

WLD 1121 Basic Arc Welding 4 0 15 9

The operation of AC transformers and DC motor generator arc welding sets. Studies made of welding heats, polarities, and electrodes for use in joining varous metal alloys by the arc welding process. After the student is capable of running beads, butt, and fillet, welds in all positions are made and tested in order that the student may detect his weaknesses in welding. Safety procedures emphasized in the use of tools and equipment. Prerequisite: None.

WLD 1123 Inert Gas Welding 1 0 6 3

Introduction and practical operations in the use of inert-gas-shield arc welding. A study of the equipment, operation, safety and practice in the various positions. A thorough study of such topics as: principles of operation, shielding gases, filler rods, process variations and applications, manual and automatic welding. Prerequisite: None.

WLD 1124 Advanced Arc Welding 3 0 12 7

Extensive practice in the welding of different metals and pressure pipe in all positions. The micro-wire welding process and a thorough study of such topics as principles of operation, nomenclature of machine, filler metals and shielding gases for the different type of metals. Special processes such as hard-facing laser beam and ultra-sonic welding. Introduction to the welder certification procedures and practices. Prerequisites: None.

WLD 1126 Advanced Inert Gas Welding 3 0 9 6

A continuation of WLD 1123. Theory and practice in inert gas welding. Both ferrous and non-ferrous welding applications covered. Inert spot welding, CO2 welding, gas metal-arc, mig pipe welding, and automatic welding are taught. Special consideration given to shielding gases and certification procedures. Prerequisite: None.

WLD 1127 Introduction to Pipe Welding 1 0 6 3

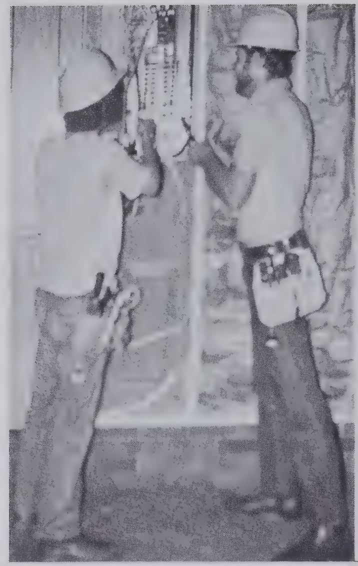
Designed to provide practice in the welding of pressure piping in the horizontal, vertical and horizontal fixed positions using shielded metal arc welding processes according to the ASME code.

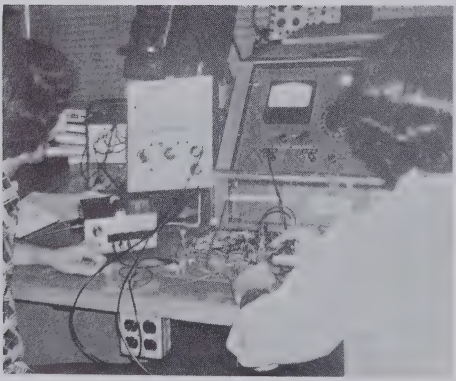
WLD 1130 Applied Basic Arc and Gas Welding 1 0 6 3

Welding demonstrations by the instructor and practice by students in the welding shop. Safe and correct methods of assembling and operating the welding equipment. Practice given for surface welding; bronze welding, silver-soldering, and flame-cutting methods applicable to mechanical repair work. Prerequisite: None.

WLD 1131 Applied Inert Gas Welding 2 0 3 3

Introduction and practical operation of the Inert Gas Welding processes. A study of the principles of operation of shielding gases, filler metals, M.I.G. guns, T.I.G. torches and T.I.G. spot guns will be covered. Special attention given to the joining of thin metals, both ferrous and non-ferrous. Safety procedures emphasized throughout the course. Prerequisite: None.





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B.A. Wake Forest University; M.A.T. Duke University; graduate study Wake Forest University

Sample, Phyllis D. .... Associate Degree Nursing
B.S.N. University of Bridgeport

Settle, Rosemary A. .... Associate Degree Nursing
Registered Nurse, B.S.N. University of North Carolina — Greensboro

Sledge, Sandy D. .... Executive Secretarial Science
B.S., M. Ed. University of North Carolina — Greensboro

Staley, Thomas R., Senior Instructor .... Business Administration
B.S. Appalachian State University; M. Ed. University of North Carolina; further study Guilford College

Stephenson, Andrew H., Senior Instructor .... Marketing and Retailing
B.A., B.S. High Point College; M. Ed. University of North Carolina — Greensboro; advanced study George Washington University, Marine Corps Institute

Stern, Robert L., Chief Coordinator .... Learning Labs
B.J. University of Missouri; M.F.A. in progress, University of North Carolina — Greensboro

Stewart, Mary H. .... Practical Nurse Education
Registered Nurse, B.A. Lenoir Rhyne College; B.S. Johns Hopkins University

Stoltz, Herbert E. .... Automotive Mechanics
Disc Brake School, G.M. Training Center; Automotive Tune-up and Emissions Control, B.M. Training Center; Carburetor School, G.M. Training Center; thirteen years experience in field of automotive mechanics

Stowers, Marilyn H., Coordinator .... Pre-Technical Program
B.A. Atlantic Christian; M. Ed. University of North Carolina — Greensboro; graduate study University of North Carolina — Chapel Hill and Wake Forest University; further study Queens College and Orton Reading Center

Taylor, Thomas A. .... Life Sciences
B.S., M.S. North Carolina State University; two years toward Ph. D. North Carolina State University; further graduate study University of North Carolina — Greensboro

Teachey, Anne M., Coordinator .... Learning Labs
B.S. University of North Carolina — Greensboro

Tedder, Jake D. .... Business Administration
A.A. Pfeiffer College; B.S. University of North Carolina — Chapel Hill; M. Ed. University of North Carolina — Greensboro

Tharpe, Betty H., Senior Instructor .... Building Trades Drafting
Western Electric Training Center; General Electric Design Course; Elon College

Tompkins, Ernest Wayne, Coordinator .... Learning Labs
B.A., B.S. Jacksonville State University; further study University of Alabama; M.A. Appalachian State University

Tornow, Ann Bingham .... Humanities
B.A. Wake Forest University; Graduate School Wake Forest University; M.A. in progress

Trotter, Donald L., ... Electronics Engineering Technology
B.S., E.E. North Carolina State University, North Carolina Registered Engineer

Voorhees, Lawrence .... Physics
B.S., M.S. University of Tennessee

Wade, Cameron .... Bookstore Manager
B.S. Pfeiffer College

Weaver, Larry, Senior Instructor .... Fire Science
A.A.S. Rowan Technical Institute; additional study Pfeiffer College, Winston-Salem State University

White, Norman .... Welding
Special training North Carolina State and Pratt Institute, Brooklyn, New York; Anaconda Welding Training Program; Certified; U.S.A.F. Mil-T5021 and U.S. Navy Specifications; graduate U.S.A.F. Airplane Mechanics. Aerial Gunnery and Aerial Gunnery Instructors School; further study University of Tennessee — Oak Ridge

Wilder, William B. .... Automotive Mechanics
Chowan College; Forsyth Technical Institute; General Motors Training Center

Williams, Joyce M., ... Associate Degree Nursing
Registered Nurse, Cabarrus Memorial Hospital School of Nursing; B.S. Pfeiffer College

Williams, L. T., Director .... Occupational Extension
B.S. Western Carolina University; further study North Carolina State University; M. Ed. University of North Carolina — Greensboro

Williams, Thelma M. .... Business Administration
B.A. Bennett College; M.B.A. University of North Carolina — Greensboro

Winning, James R., Department Head .... Health Technologies
B.S. Clemson University; M.A., East Tennessee State University

Wright, Kathy .... Associate Degree Nursing
Registered Nurse; B.S. Appalachian State University; West Suburban Hospital School of Nursing

Zablocki, Audrey B. .... Head Librarian
B.S. Appalachian State University; M. Ed. University of North Carolina — Greensboro; advanced professional study, School of Library Science, Universtiy of North Carolina — Chapel Hill; Certified Media Specialist, HEA II Chapel Hill; graduate study Wake Forest University

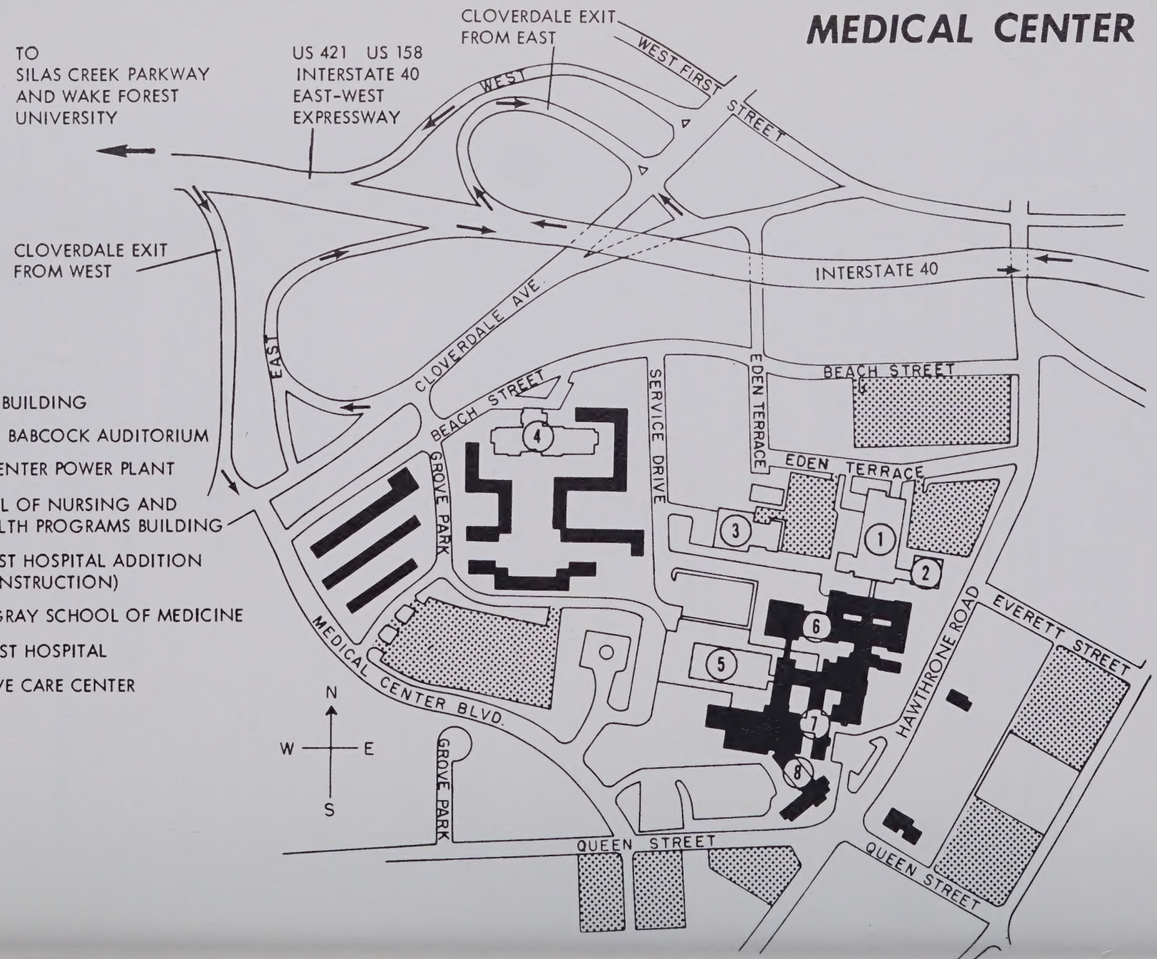
The faculty and staff of the Institute hold memberships in the following learned societies and professional associations:

Adminstrative Management Society
Alpha Kappa Alpha
American Association of Community and Junior Colleges
American Association of Physics Teachers
American Association of University Professors
American Association of University Women
American Business Communications Association
American Horticulture Society
American Institute of Architects

American Institute of Design and Drafting
American Library Association
American Management Society
American Nurses' Association
American Personnel & Guidance Association
American Red Cross
American Society of Engineering Education
American Society of Heating, Air Conditioning, and Refrigeration Engineers
American Society of Metals
American Society of Allied Health Professions
American Society of Tools and Manufacturing Engineers
American Technical Education Association
American Vocational Association
American Welding Society
Association for Childhood Education International
Association for Educational Communications and Technology
Association of Community College Public Information Officers
Beta Alpha Psi
Beta Beta Beta
Beta Phi Mu
Business and Professional Women's Club
Carolinas Association of Collegiate Registrars and Admissions Officers
Chi Lambda Chi
College News Association of the Carolinas
College Reading Association
Dare County Tourist Bureau
Data Processing Managers Association
Delta Pi Epsilon
Delta Sigma Theta
Department of Correction Community Volunteer Program
Educational Media Association of North Carolina
Epsilon Pi Tau
Forsyth Council of the International Reading Association
Forsyth County Chief's Council of the
  Volunteer Fireman's Association
Forsyth County Heart Association, Public Relations Advisory Committee
Forsyth County Volunteer Fireman's Association
Governor's North Carolina Commission on Education and Employment
  of Women
Industrial Services Division of North Carolina Department of
  Community Colleges
International Council on Hotel, Restaurant Institutional Education
International Graphic Arts Education Association Inc.
International Reading Association
International Society of Electronic Technicians
Iota Lambda Sigma
Kappa Delta Pi
Kernersville Lions Club
Learning Resources Association
National Association of Educational Secretaries
National Business Education Association
National Classroom Teachers Association
National Council of Teachers of Mathematics
National Education Association
National Electrical Contractors Association
National Electrical Inspectors Association
National Environmental Systems Contractors Association
National Fire Instructors Society
National Fire Protection Association
National Instructors Association of the Refrigeration Service
  Engineering Society
National League of Nursing
National Organization of Women
National Rehabilitation Association

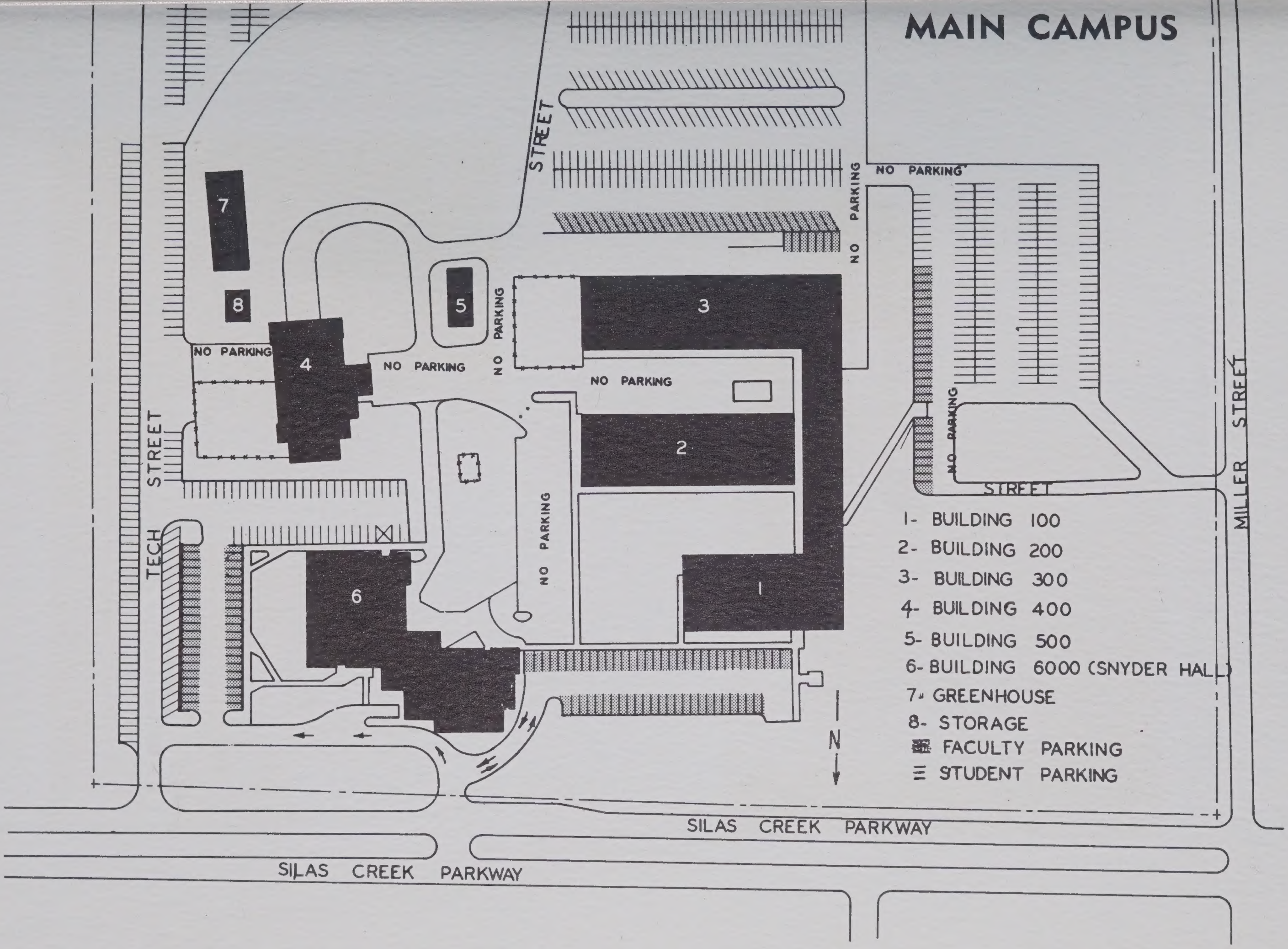
National Secretarial Association
National Society of Professional Engineers
North Carolina Adult Education Association
North Carolina Advisory Training Council
North Carolina Association of Educational Data Systems
North Carolina Association of Educational Officer Personnel
North Carolina Association of Fire Science Educators
North Carolina Association of Physics Teachers
North Carolina Association of Public Community College Presidents
North Carolina Automotive & Diesel Instructors Association
North Carolina Business Education Association
North Carolina Community College Adult Educators Association
North Carolina Council of Associate Degree Nursing Programs
North Carolina Council of Local Administrators
North Carolina Council of Teachers of Mathematics
North Carolina Developmental Studies Association
North Carolina Education Association
North Carolina Electronics Technicians Association
Nroth Carolina English Teachers Association
North Carolina Innkeepers
North Carolina Library Association
North Carolina Literary and Historical Association
North Carolina Motel Association
North Carolina Motor Carriers Association Maintenance Council
North Carolina Personnel and Guidance Association
North Carolina Science Teachers Association
North Carolina State Employees Association
North Carolina State Fire Services Association
North Carolina State Horticulture Advisory Committee
North Carolina Student Services Association
North Carolina/Virginia College English Association
North Carolina Vocational Association
North Carolina Community College Association of Division Chairmen and Department Heads
Northwest North Carolina Development Association
Numerical Control Society
Ohio Florists Association
Phi Beta Kappa
Phi Delta Kappa
Phi Kappa Phi
Pi Gamma Mu
Printing Industries of the Carolinas
Refrigeration Service Engineering Society
Sigma Theta Tau
Society of Manufacturing Engineers
Society of Mechanical Engineers
South Atlantic Modern Language Association
Southeastern Conference on English
Southern Business Education Association
Theatre Guild
Winston-Salem Business and Professional Women's Club
Winston-Salem Engineers Club
Winston-Salem Greater Chamber of Commerce
Winston-Salem Mayor's Committee on Employment of the Handicapped
Winston-Salem Personnel Association
Winston-Salem Public Relations Roundtable
Winston-Salem Sales & Marketing Executives Club
Board of Directors:
  Goodwill Rehabilitation Center
  North Carolina Restaurant Association
  Voluntary Action Center
  Wesley Foundation
  Winston-Salem Industries of the Blind
  Winston-Salem Experiment in Self Reliance

MEDICAL CENTER



1- THE HANES BUILDING
2- CHARLES H. BABCOCK AUDITORIUM
3- MEDICAL CENTER POWER PLANT
4- THE SCHOOL OF NURSING AND ALLIED HEALTH PROGRAMS BUILDING
5- N.C. BAPTIST HOSPITAL ADDITION (UNDER CONSTRUCTION)
6- BOWMAN GRAY SCHOOL OF MEDICINE
7- N.C. BAPTIST HOSPITAL
8- PROGRESSIVE CARE CENTER
▨ PARKING

MAIN CAMPUS


1- BUILDING 100
2- BUILDING 200
3- BUILDING 300
4- BUILDING 400
5- BUILDING 500
6- BUILDING 6000 (SNYDER HALL)
7- GREENHOUSE
8- STORAGE
▨ FACULTY PARKING
☰ STUDENT PARKING
N
NO PARKING
NO PARKING
NO PARKING
NO PARKING
NO PARKING
NO PARKING
NO PARKING
NO PARKING
STREET
STREET
STREET
MILLER STREET
TECH STREET
SILAS CREEK PARKWAY
SILAS CREEK PARKWAY
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